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Carbon Chemistry of the South Atlantic Ocean and the Weddell Sea:

The Results of the Atlantic Long Lines (AJAX) Expeditions, October, 1983 - February, 1984

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SECTION I

EXPERIMENTAL PROCEDURES

INTRODUCTION

This report summarizes the seawater carbonate chemistry data which were obtained as part of the Long Lines (AJAX) Expedition in the South Atlantic Ocean and Weddell Sea, October-November 1983 and January-February 1984 on board the R/V KNORR. The partial pressure of CO_2 (pCO_2) and the concentration of total dissolved carbon dioxide (total CO_2 or TCO_2) were measured at sea on about 750 selected samples from most of the 138 hydrographic stations which were occupied during the two legs of the cruise. An additional 120 water samples were collected and analysed for TCO_2 in our land-based laboratory using the new technique of CO_2 coulometry. All the analyses were performed at least in duplicates. In addition, the total alkalinity (TALK) has been computed for all of the samples for which the necessary pCO_2, TCO_2, salinity and nutrient concentration values have been determined. The experimental methods used for this study, the calibration techniques and precision of the measurements are discussed in detail.

Vertical sections for the pCO_2, TCO_2, TALK, and apparent oxygen utilization (AOU) along the Greenwich meridian from 5° N to 70° S are presented, for the depth ranges 0-1000 meters and 0-6000 meters (Figures 7-10).

The relationships between the various measured properties are indicated on property-property plots for samples throughout the water column (Figures 11-20). The final section is a data table, presenting in tabular format the various measured and computed values mentioned above.

EXPERIMENTAL METHODS

Gas Chromatograph System for pCO_2 Analysis:

The equilibrator-gas chromatograph system used during the expedition for the determination of partial pressure of CO_2 was similar to the one which was used during the TTO-North Atlantic and TTO-Tropical Atlantic expeditions, and has been described elsewhere (Takahashi et al., 1982; Smethie et al., 1985) (see Figure 1). Briefly, water samples for analysis are drawn from the 10-liter Niskin samplers of a rosette cast directly into 500-ml narrow-necked Pyrex flasks which serve both as sample containers and equilibration vessels. The samples are poisoned with 1/4 ml of saturated mercuric chloride solution to prevent biological modification of the pCO_2, and are stored in the dark until measurement, which normally was performed within 48 hours of sampling. A headspace of 3 to 5 ml was left above the water in the flasks to allow for thermal expansion during storage. The flasks are sealed air-tight using screw-caps with conical plastic liners.

Prior to analysis, the sample flasks are brought to 20.00 °C in a thermostatted water bath, and about 65 ml of the water is displaced

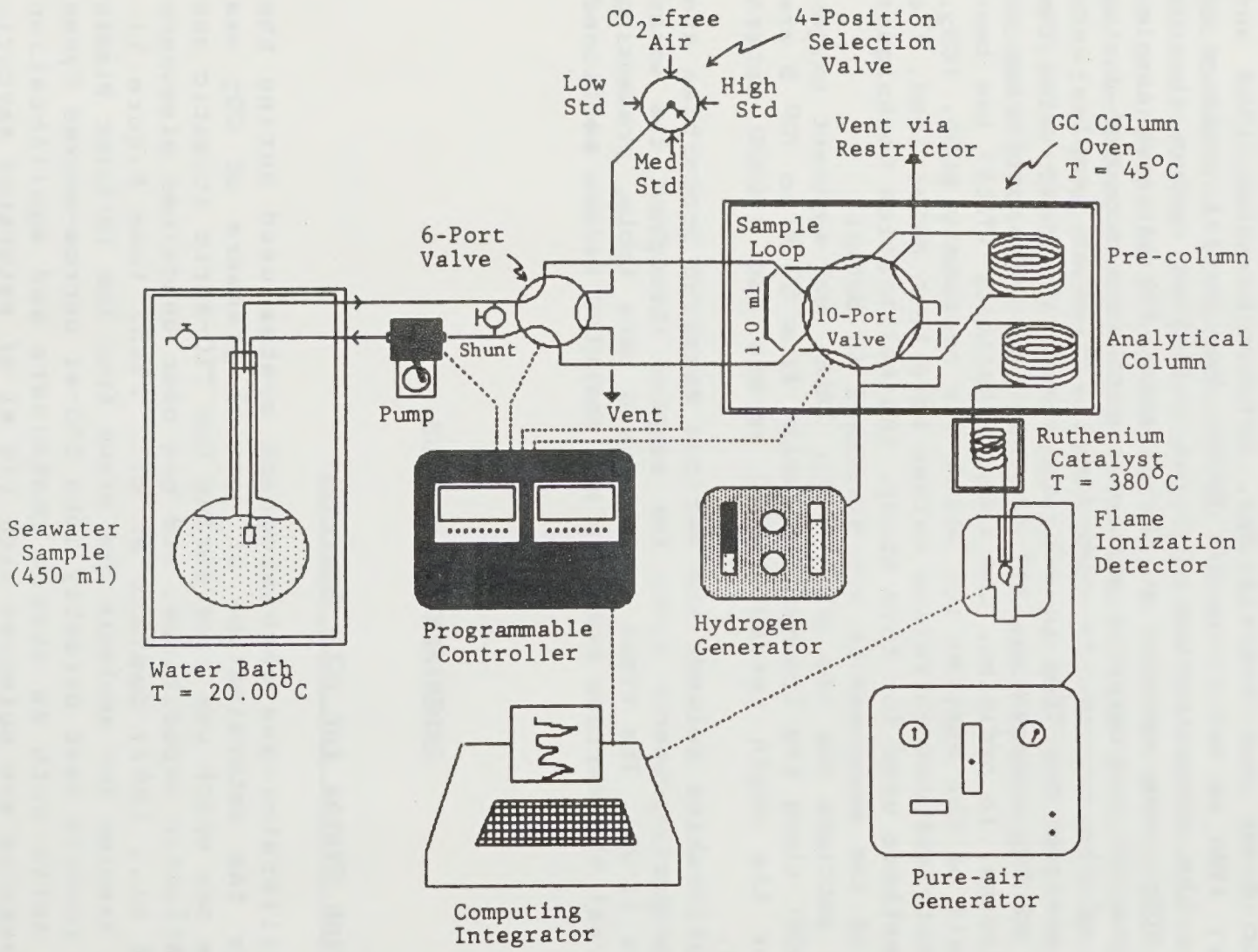


Fig. 1 Schematic diagram of gas chromatograph-based system for the determination of CO_2 partial pressure in seawater. Single solid lines represent gas flow pathways, dotted lines represent data and control signal paths, and solid double lines enclose thermally isolated zones. The valves are shown in the orientation they would have just after an equilibrated gas sample is injected into the carrier gas stream of the gas chromatograph for analysis. After the CO_2 peak elutes from the precolumn into the analytical column, the 10-port valve will be returned to its normal position, backflusing the water vapor and any hydrocarbons heavier than methane from the system while connecting the sample loop to the equilibration subsystem to prepare for the next sample.

with air of known CO_2 concentration. The air in the flasks and in the tubing connecting the flasks to the gas chromatograph sample loop is recirculated continuously for approximately 20 minutes, with a gas disperser about 1 cm below the water surface providing large contact area between water and air bubbles. At the end of the equilibration period, the circulation pump is switched off and the air pressure throughout the system is allowed to equalize. A 1-ml aliquot of the equilibrated air is isolated from the equilibration subsystem and injected into the carrier gas stream of the gas chromatograph by cycling the gas sampling valve to which the sample loop is attached. The gas chromatograph, a Perkin-Elmer Model Sigma-4, uses hydrogen as the carrier gas and is equipped with a 2-meter column of Chromosorb 102 to separate the CO_2 from the other components of the air. After separation, the CO_2 is converted into methane and water vapor by reaction with the hydrogen carrier in a catalytic converter of ruthenium operated at 380 ^oC, in a manner similar to that described by Weiss (1981), but without the use of a palladium pre-catalyst. The methane produced by this reaction is then measured with a precision of $\pm$ 0.05% (one standard deviation) using a flame ionization detector. The signal from the flame ionization detector is fed into a Perkin-Elmer Model Sigma-10 digital integrator, where the area of the CO_2 peak is computed, and the concentration of CO_2 in the sample is determined by comparison with the peak areas of known amounts of CO_2 from reference gas mixtures. The GC detector response is calibrated at least once per hour by injecting, with the same sample loop, CO_2-air mixtures which are calibrated against the World Meteorological Organization standards of C. D. Keeling.

The equilibrated air samples are saturated with water-vapor at the temperature of equilibration and have the same pCO_2 as the water sample. By injecting the air aliquot at the pressure of equilibration and without removing the water vapor, the partial pressure of CO_2 is determined directly, without the need to know either the pressure of equilibration or the water vapor pressure (Takahashi et al., 1982). It is necessary to know the pressure of the calibration gas mixtures, which is done by venting the sample loop to atmospheric pressure after filling and measuring the atmospheric pressure by means of a high-accuracy electronic barometer (Setra Systems, Inc., Model 270, accuracy $\pm$ 0.3 millibars, calibration traceable to NBS provided by manufacturer). Additional corrections are required to account for the change in pCO_2 of the sample water due to the transfer of CO_2 to or from the water during the equilibration with the recirculating air, and to account for the difference in pressure between the air in the equilibrator when the pump is running and that in the GC sample loop when the pump is off. The overall precision of the pCO_2 measurement is estimated to be about $\pm$ 0.2%.

GC and Coulometric Systems for Total CO_2 Measurements:

Two independent methods were used for the measurement of total CO_2 (TCO_2) in seawater: determination at sea using the gas chromatograph described above with a separate CO_2-extraction subsystem, and that in the shore-based laboratory of stored water samples using the new technique of CO_2-coulometry. Both techniques will be described below.

The gas-chromatograph system used on board the ship consisted of

an extraction system for removing the CO_2 from acidified 3-ml water samples linked to the same gas chromatograph that was used for the pCO_2 analyses (see Figure 2). Water samples were drawn from the Niskin samplers into 125-ml glass bottles with ground-glass stoppers, which were greased with silicone stopcock grease. The bottles were filled with three rinses and at least one volume of overflow, 2 to 3 ml of the water was removed to provide a headspace for thermal expansion, and the stoppers were held in place with strong rubber bands. About 1/8 ml of saturated mercuric chloride solution was added to prevent biological alteration of the TCO_2. An attempt was also made to draw samples using 60-ml plastic syringes equipped with plastic valves, but the samples were found to become contaminated with CO_2 (presumably dissolved in the rubber end of the plunger) in a relatively short period of time, so that method was abandoned. For analysis, a metal (Hastelloy-C) sample loop of approximately 3 ml volume was filled with sample, with about 15-20 ml used for rinsing the tubing and loop, and the loop was connected to the recirculating carrier gas of the extraction system (CO_2-free air). At the same time, a 1/3 ml loop filled with 1N hydrochloric acid was similarly connected. The carrier gas forced the acid through the water-sample loop and the acidified water was then forced into a stripping column containing a coarse glass frit near the bottom. A small gas pump continually recirculated the gas through the acidified water and through a dilution volume of about 300 ml, until the CO_2 was thoroughly equilibrated between water and gas and the gas was well homogenized (approximately 6 minutes). During this period, the system was connected to the sample valve of the GC, so that the sample loop was continuously flushed and contained a representative aliquot of the gas at the end of the period. Since the air recirculates through the water, a small amount (approximately 1%) of the CO_2 in the system remains dissolved in the acidified water. The maximum temperature variation due to changes in room temperature, 4 ^{o}C, would cause a variation in the fraction of the CO_2 in the water of approximately 10% of the amount retained, or about 2 umol/kg. The maximum salinity variation would cause a much smaller effect. Since the fraction remaining in the water is relatively small and nearly constant, the calibration procedure will allow variations in this amount of CO_2 to be ignored. The circulation pump was then switched off and the gas sampling valve was switched to inject the aliquot into GC carrier gas stream. By selecting the appropriate volumes for the water sample and the dilution volume, the amount of CO_2 introduced into the GC was kept close to the amount in one of the calibration gas mixtures (about 789 ppm).

In order to determine the accuracy of the shipboard TCO_2 analyses, a number of samples were taken in 500-ml glass bottles with ground-glass stoppers in the same manner as the smaller samples taken for shipboard analysis. These samples were then shipped back to our shore-based laboratory for analysis using a totally independent method, CO_2 coulometry. The basis of this method is described in a paper by Johnson et al. (1985). Briefly summarized, the method is as follows.

A sample of the seawater for analysis is measured by filling a calibrated sample pipet (of approximately 50 ml volume) with sufficient overflow to insure the thorough rinsing of the pipet and tubing, transferring the water to an extraction tube, acidifying, and sweeping the evolved CO_2 into the cell of a CO_2 coulometer with a flow

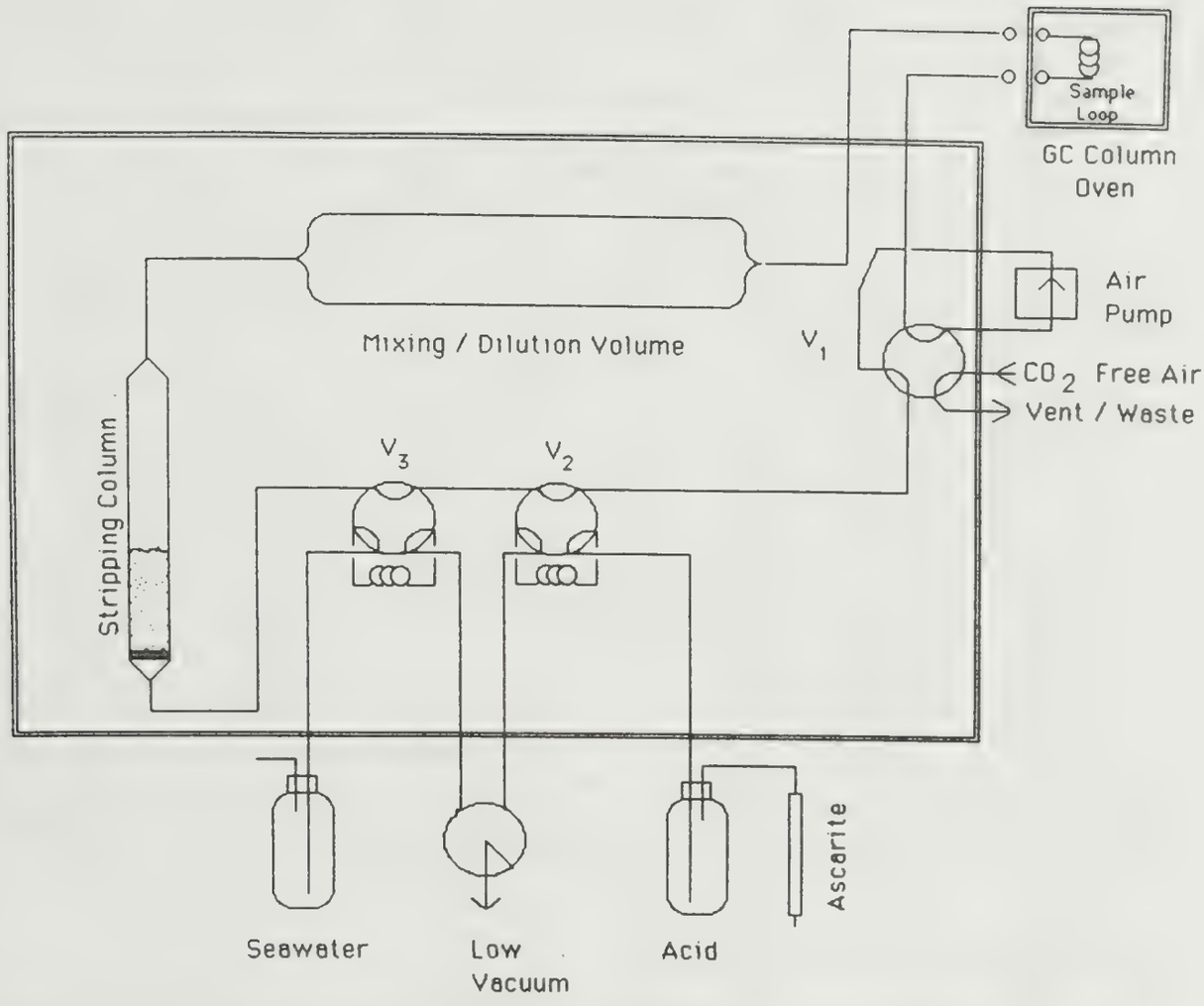


Fig. 2 Schematic diagram of the CO_2 extraction subsystem of the gas chromatograph TCO_2 analysis system. In operation, the lines shown connected to the GC sample loop are attached to the 10-port valve shown in Fig. 1, in place of the pCO_2 equilibration subsystem. The valves on Fig. 2 are shown in the position they would have while CO_2 is being stripped from the acidified seawater sample. Valves V_2 and V_3, which allow the introduction of metered quantities of hydrochloric acid and seawater respectively, have been returned to the fill position to allow for the preparation of the next sample. After cycling the 10-port valve (Fig. 1) to inject an aliquot of CO_2-air mixture for analysis, V_1 will be turned to alternate position, which will cause CO_2-free air to sweep the system of CO_2 and force the stripped acidified water in the stripping column out through V_1 by way of V_2 and V_3 to a waste reservoir.

of CO_2-free carrier gas. In the coulometer cell, the CO_2 is quantitatively absorbed by a solution of ethanolamine in dimethylsulfoxide (DMSO). Reaction of the CO_2 with the ethanolamine forms the weak acid hydroxyethylcarbamic acid. The pH change associated with the formation of this acid results in a color change of thymolphthalein in the solution. The color change, from deep blue to colorless, is detected by a photodiode, which continually monitors the transmissivity of the solution. The electronic circuitry of the coulometer, on detecting the change in the color of the pH indicator, causes a current to be passed through the cell, electro-generating hydoxyl (OH-) ions from a small amount of water in the solution. The OH- generated titrates the acid, returning the solution to its original pH (and hence color), at which point the circuitry interrupts the current flow. The product of current passed through the cell and time is related by the Faraday constant to the number of moles of OH- generated to titrate the acid and hence to the number of moles of CO_2 absorbed to form the acid.

We have calibrated the coulometer in four different ways: by injecting measusred volumes of pure CO_2 gas at known pressure and temperature, by analysis of the CO_2 evolved from gravimetrically prepared solid calcium carbonate and sodium carbonate, and by injecting measured volumes of CO_2-air mixtures (WMO-calibrated mixtures referred to above) at known temperature and pressure. With the exception of the last (which provides relatively small quantities of CO_2 and hence is susceptable to small errors in the blank determination, and which differed by 0.2%), all of the calibration techniques agreed with the electrical calibration of the instrument (i.e. independently measuring current and time and comparing with the readout) to within 0.1%. We have also observed that the calibration of the coulometer has changed by no more than 0.1% over the 2 1/2 years we have used it. With care, the coulometer is capable of a precision of better than $\pm$ 1 uM/liter in samples of 2200 uM/liter.

Atmospheric CO_2 measurements:

Air samples were analyzed for CO_2 concentration by filling the GC sample loop with air drawn from near either the ship's bow or stern (depending on the relative wind direction) using a metal-lined plastic sampling line and small bellows pump. The air sample was introduced directly into the sample loop without drying, and the excess pressure in the loop was allowed to vent to the atmosphere prior to injection into the GC for analysis. The calibration of the GC with standard gas mixtures at the same pressure allows the concentration of CO_2 in the sample to be computed directly. Table 1 lists the concentration of CO_2 in atmospheric samples taken during the two legs of the cruise. These values have been recalculated to give the concentration as a mole fraction of CO_2 in dried air, the mole fraction in air which is saturated with water vapor at the temperature of the sea surface, and the partial pressure of CO_2 in the air at the conditions of the sea surface (water saturated at sea surface temperature and at the ambient atmospheric pressure).

Table 1 Atmospheric concentration of CO_2 observed during the two legs of AJAX cruise. Samples were analyzed without removal of water vapor, and the concentration in dry air (VCO_2) have been computed using the observed wet and dry bulb thermometer readings. The CO_2 concentration in air saturated with water vapor at the temperature of the sea surface (VCO_2*), and the partial pressure of CO_2 in water-saturated air (pCO_2) at the barometric pressure which was observed at the time of analysis (pCO_2) are also given.

DATE	TIME	LAT	LONG	VCO_2	VCO_2*	PRESS	pCO_2
-----(GMT)-----		-----(DEG MIN)-------		---(ppm)---		(mb)	(uatm)
10/08/83	1800	02 59.6 N	03 46.2 W	345	333	1012.6	333
10/09/83	0945	01 30.1 N	03 37.9 W	344	334	1012.8	334
10/10/83	2200	01 30.3 S	03 20.0 W	345	335	1012.9	335
10/11/83	1630	03 00.2 S	03 12.8 W	346	336	1014.1	336
10/13/83	2200	07 33.0 S	01 07.8 W	342	333	1016.5	334
10/15/83	0100	09 45.6 S	00 46.0 E	341	333	1015.5	333
10/16/83	0300	11 59.9 S	00 51.7 E	341	333	1015.7	334
10/16/83	2000	14 00.2 S	00 57.6 E	341	334	1017.0	335
10/20/83	1830	21 01.4 S	01 19.2 E	343	335	1021.8	338
10/23/83	1230	26 59.5 S	01 39.8 E	343	335	1026.2	339
10/29/83	0930	39 00.5 S	00 59.2 E	342	337	1021.5	340
11/01/83	2100	42 48.3 S	04 52.8 E	341	337	1014.8	338
01/20/84	1900	51 50.2 S	01 11.6 E	342	339	990.0	332
01/21/84	1530	53 49.0 S	01 20.2 E	343	340	967.6	325
01/25/84	0300	61 00.2 S	00 52.7 E	343	341	993.2	334
01/25/84	2130	62 00.4 S	00 44.9 E	342	339	996.8	334
01/26/84	1500	64 00.1 S	00 20.4 E	342	340	993.9	333
01/29/84	0300	69 21.8 S	00 19.1 W	342	340	1002.6	337
02/01/84	1600	61 29.4 S	16 41.4 W	342	340	996.5	334
02/05/84	2100	58 40.9 S	26 50.6 W	341	338	1005.7	336
02/08/84	0100	56 48.5 S	34 17.8 W	341	338	983.2	328
02/13/84	0100	59 45.7 S	48 55.7 W	342	339	997.4	334
02/15/84	1300	60 48.9 S	55 38.6 W	342	340	993.9	334

CALIBRATION AND DATA REDUCTION METHODS

The methods used to calculate pCO_2 or TCO_2 from raw GC peak areas differed somewhat from the procedure which was followed in the past and requires a detailed discussion. The separate parts of the procedure are: 1) calibration of the GC against two or three standard gas mixtures at known pressure, to allow the pCO_2 of the air in the sample loop to be determined from the CO_2 peak area; 2) for TCO_2, the relative volumes of the water sample loop, air sample loop and CO_2-extraction system are determined by measurement of the CO_2 evolved from samples of gravimetrically prepared sodium carbonate solution; and 3) also for TCO_2 measurements, a correction for the extraction efficiency of the stripping system was applied, using the comparison between the TCO_2 measured with the GC and that measured with CO_2 coulometry.

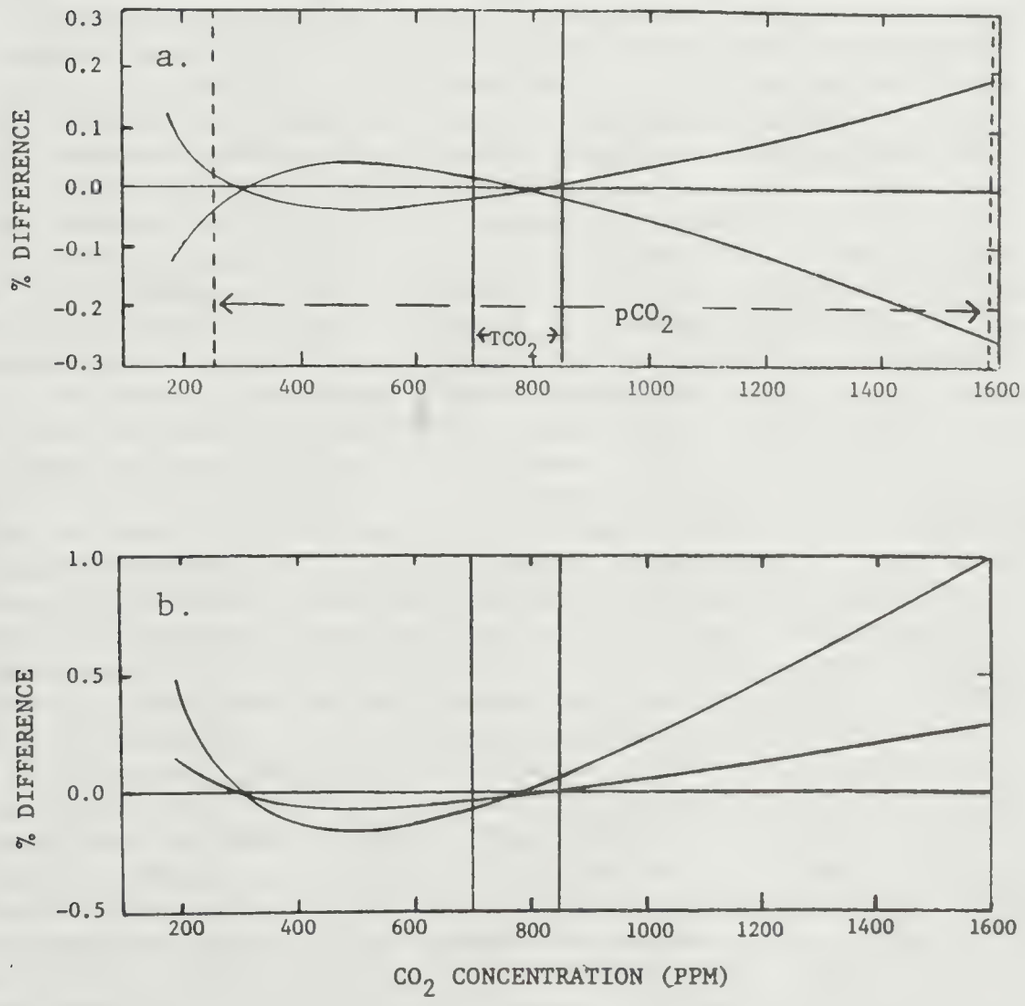
Calibration of the GC:

During Leg 1 of the expedition, the flame ionization detector (FID) response has been approximated by a straight line curve through the values of the two standard gas mixtures (294 and 789 ppm). During Leg 2, this same procedure was used for only the TCO_2 analyses, while pCO_2 measurements were calculated from a response curve which was parabolic and passed through the values of all three standard gas mixtures (CO_2 concentrations of 294, 789 and 1388 ppm).

The response curve of a FID can be made to be very nearly linear over a wide range of concentrations. With the accumulation of deposits on the collector and with changes in the ratio of hydrogen to air feeding the flame, however, the response can become significantly non-linear. Figure 3 demonstrates the amount of error which would be introduced by the use of a linear rather than parabolic approximation to the actual detector response. The difference plotted is the concentration calculated from a parabolic curve less that calculated from a linear curve for a given peak area, divided by the "linear" concentration and multiplied by 100 to convert it into a percent difference. If the response were perfectly linear, the curve would fall on the 0.0 % difference line. As can be seen from Fig. 3-a, which applies to Leg 1 data, the maximum error resulting from using the 2-standard linear approximation is no greater than 0.25%, or 4 ppm at a value of 1600 ppm. All of the TCO_2 analyses gave concentrations which were clustered closely around the concentration of the intermediate standard (789 ppm), and the maximum difference is consequently much smaller, less than 0.05% (equivalent to 1 uM/kg) for all samples. As shown in Fig. 3-b, the FID response curve was much more non-linear during Leg 2 compared to Leg 1 (note the change in scale of the vertical axis). During this leg, all pCO_2 analyses, which range from approximately 300 to 1200 ppm, were computed using a 3-point response curve and consequently the large potential errors (up to 1% at 1600 ppm) do not apply. Only the central portion of the figure, representing the range of TCO_2 analyses, is meaningful, and again the possible errors in this range are small, being no greater than 0.08% (or less than 2 uM/kg).

In the short term, the detector response can change rapidly in response to changes in the laboratory temperature, and occasionally this change was as great as 1% during the interval between successive calibration sequences (less than one hour). Rapid changes in the shipboard laboratory temperature were experienced as the outside door

Fig. 3 The difference between the CO_2 concentrations estimated using assumed linear and parabolic detector responses. The zero reference line represents a linear fit to two calibration points, and the curved lines represent the upper and lower limits of parabolic fits to three calibration points. a.) This panel applies to the measurements during Leg 1. The vertical dashed and solid lines indicate the ranges of measured pCO_2 and TCO_2 values respectively. It is seen that the difference between the two-point linear calibration and the three-point parabolic calibration is small: less than 0.02% for TCO_2 and less than 0.2% for pCO_2. b.) The curves represent the upper and lower limits observed during Leg II, indicating that the detector response during Leg II was more non-linear than that during Leg I. Therefore, for the pCO_2 measurements during Leg II, parabolic fits to three calibration points were used. For the TCO_2 measurements demarked by solid vertical lines, linear fits to two calibration points were used.



was often opened to reduce the level of freon contamination in the laboratory air. In order to reduce the effects of this change in detector response, we assume that the detector drift is linear with time and compute the detector response curve (either linear or parabolic) using the drift-corrected peak areas for the standard gas mixtures at the time of injection of the unknown by interpolating between the analyses of each standard from the calibration sequences preceding and following the unknown.

Calibration of TCO_2 extraction system:

The number of moles of CO_2 in the GC sample loop at the time of injection of a TCO_2 sample is a function of the volume of the GC sample loop, the volume of seawater metered into the extraction system by the seawater sample loop, and the temperature and volume of the gas volume of the extraction system, as well as the concentration of CO_2 in the seawater sample. The temperature of the GC sample loop is constant, being located in the well-thermostatted GC column oven, and the remainder of the gas volume of the extraction system is submersed in a water bath, the temperature of which is monitored and recorded at the time of injection of each sample. Rather than determine the absolute volumes of the various parts of the extraction system, we have chosen to use solutions of known CO_2 concentration to establish the relationship between CO_2 concentration of the sample and the number of moles of CO_2 in the sample loop at the time of injection into the GC. Sodium carbonate powders (dried at 180 ^oC in air for about 16 hours) were weighed in our land-based laboratory, wrapped in aluminum foil, sealed in air-tight plastic vials and stored in silica gel desiccant for use in checking the extraction system during the cruise. At sea, solutions of known CO_2 concentration were prepared by opening the foil packets and placing the entire packet in a volumetric flask filled to the reference line with low-CO_2 water. During Leg 1, this water was prepared by stripping distilled water with CO_2-free air overnight; during Leg 2 it was found to be much easier to prepare the water as needed by passing water from the ship's evaporator through a pair of deionization columns (Cole-Parmer Research cartridge or equivalent). Regardless of the method used to produce the water, the concentration of CO_2 was checked by running an aliquot as an unknown, and the final concentration of CO_2 in the standard solutions was corrected for this residual CO_2. The standard solutions, once made up, could not be successfully stored for more than a few hours, and consequently only the initial calibration determined from a given solution was used. During the second leg of the expedition, drift in the calibration of the extraction system, possibly due to a progressive fouling of the seawater sample loop, amounted to a nearly linear decrease of about 0.75% over a period of 33 days. Due to difficulty experienced in preparing standard solutions on shipboard during the first leg, the drift during that leg is not as certain, but appears to have been of a similar magnitude as during the second leg. All TCO_2 values have been corrected for this apparent change in the calibration factor of the extraction system by fitting the calibration factors computed from all calibration runs with a linear regression against cumulative run number, then using the equation of the resulting line to calculate system calibration factor to be applied to each analysis. Since all the calibration runs have been used to

establish the calibration curve, only the effects of long-term variation in the volumes of the extraction system are removed by this procedure, while those due to short-term variations, such as in the extraction efficiency, may remain.

Extraction efficiency correction:

A more serious problem than the long-term drift of the calibration factor of the extraction system was an occasional slight decrease in the extraction efficiency, apparently due to the accumulation of salt on the check valves of the circulation pump. Whenever the pumping rate was sufficiently reduced to be obvious, the pump was disassembled and cleaned, but before this stage was reached, the extraction efficiency appears to have been reduced to such an extent that the amount of time allowed for the extraction was insufficient, and the amount of CO_2 in the recirculating gas was slightly low. This effect was not noticed during the cruise, but became evident when the TCO_2 measurements made by GC were compared with the coulometric analyses made on stored duplicate samples. There are three arguements which support the superiority of the coulometer data. First, as mentioned earlier, our coulometer calibration is consistant with four independent methods and does not appear to change with time. Secondly, the coulometer data are more precise (i.e. $\pm$ 0.9 uM/kg, as shown in Figure 5). Thirdly, our long-term sample storage tests show that the total CO_2 concentration in the poisoned samples is stably preserved for several months. For these reasons, we believe that the coulometric analyses of stored samples from the cruise give accurate values, and where these values do not agree with the shipboard GC values we feel justified in correcting the latter. We have attempted to correct the GC analyses for this effect by calculating the average difference between GC and coulometric analyses for blocks of GC analyses (all the analyses made during one analytical session, between periods when the GC was being used for pCO_2 analysis) and applying to the GC values as a multiplier the factor necessary to make this average difference equal zero. The largest correction required was less than 1.5%, and in general the correction was less than 0.3%.

Figure 4 shows a comparison of the coulometer TCO_2 data with the GC TCO_2 values thus corrected. A 1:1 linear correlation is observed. The r.m.s. deviation of the data points about this trend line is approximately $\pm$ 5.4 uM/kg. This represents a realistic estimate of the over-all precision including the inter-station variability. However, as shown in Figure 5, the intra-station precision of the GC analyses is about $\pm$ 3 uM/kg (root mean square deviation).

COMPARISON WITH THE RESULTS OF OTHER EXPEDITIONS

Figure 5 shows a plot of TCO_2 versus depth for a location at approximately 60° S, 1° E observed during the following three expeditions: Station 83 and 84 of this cruise (AJAX, 24 January 1984), GEOSECS Station 89 (23 January 1973) and Station 241 of the 1986 Winter Weddell Sea Project (WWSP, 18 July 1986). The GEOSECS TCO_2 values, as determined using the potentiometric alkalinity titrator, have been plotted as originally reported. However, a recent comparison

Fig. 4 Comparison of the values of total CO_2 concentration (TCO_2) determined on duplicate pairs of samples by means of gas chromatography (GC) and shore-based coulometry. The coulometric measurements have been used to provide the over-all calibration of the GC-based system; consequently the points necessarily plot near the 1:1 line. Most of the scatter of the data points about this line (i.e. a r.m.s. deviation of 5.4 uM/kg) is attributed to random errors in the GC-based measurements.

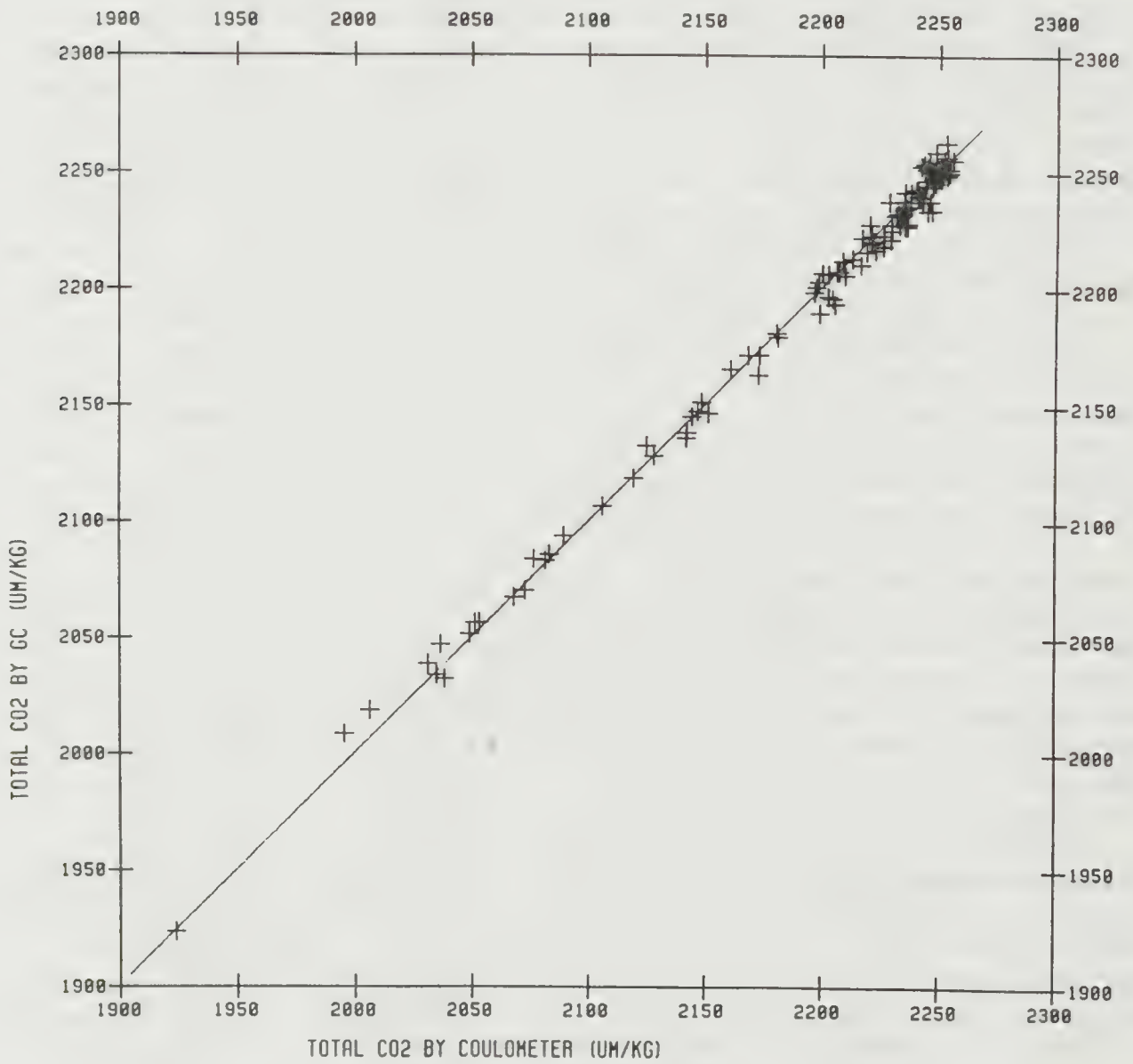
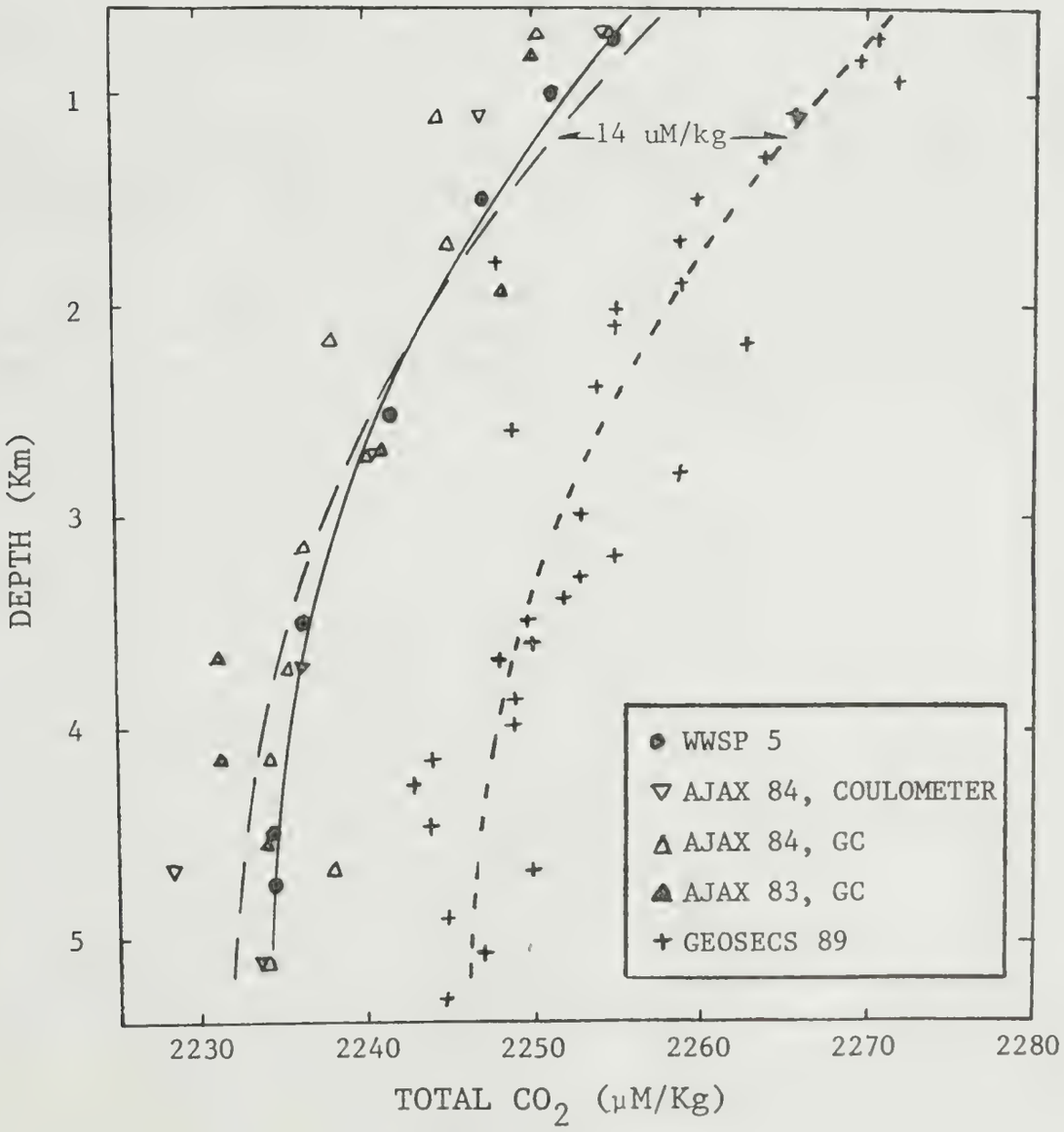


Fig. 5 Comparison of the total CO_2 concentration data obtained at GEOSECS Station 89, Winter Weddell Sea Project (WWSP) Station 5 and Long Lines (AJAX) Station 83 and 84. These stations are located at about 60°S and 1°E. The GEOSECS data (+) were obtained by means of a potentiometirc titration method; the WWSP data (●) were obtained by means of a coulometric method; and the AJAX data were obtained by means of GC (△ and ▲) and coulometric (▽) methods. The solid curve indicates a parabolic least squares fit to the seven WWSP data points with a r.m.s. deviation of about 0.9 uM/kg. The AJAX data, although scatter more widely, are consistent with the WWSP data. The short-dashed curve represents a parabolic least squares fit to the GEOSECS data with a r.m.s. deviation of about 4 uM/kg. When the GEOSECS data are corrected by -14 uM/kg as suggested by Takahashi et al. (1986), the corrected values are consistent with the WWSP data as indicated by the long-dashed curve.



of the GEOSECS TCO_2 measurements in the North Atlantic with those computed from the alkalinity and pCO_2 measurements made at the same location during the TTO/North Atlantic Study indicates that the Atlantic GEOSECS TCO_2 values are systematically in error and need to be corrected by subtracting a constant 14 micromoles/kg (Takahashi et al., 1985). Dashed curves on the figure represent the least squares parabolic fit to the GEOSECS TCO_2 data points for all depths greater than 750 meters (short dashes for the original analyses, long dashes for the points corrected by -14 uM/kg). The WWSP TCO_2 values were obtained recently using shipboard CO_2 coulometry (Chipman and Takahashi, 1986, unpublished data) and are completely independent of the GEOSECS and TTO/NAS data sets. For comparison, the seven WWSP data points from a similar depth range have likewise been fitted with a least squares parabola, shown on the figure as a solid curve. The superior quality of this data set is demonstrated by the r.m.s. deviation of $\pm$ 0.9 uM/kg for this parabolic fit. The near coincidence of these two concentration profiles (average difference between the curves at depths greater than 700 meters is -0.4 $\pm$ 3.7 uM/kg) gives confidence that the correction applied to the GEOSECS data is indeed justified. The stored TCO_2 samples from AJAX Station 84, analyzed by coulometry, plot at slightly lower concentrations than the WWSP samples, with an average offset of about -1.7 $\pm$ 2.8 uM/kg for the six samples. The shipboard GC analyses from this station show very close agreement with the other analyses, with the average deviation from the WWSP trend being -1.7 $\pm$ 3.0 uM/kg. In addition, the analyses from Station 83, which is located within one degree of Station 84, similarly agree very well (average difference is -1.0 $\pm$ 3.4 uM/kg). Although the GC values for both of these stations have been plotted as corrected using the coulometric analyses, the correction increased the values by less than 1 uM/kg, and consequently the agreement with the other data sets is meaningful.

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SECTION II

MERIDIONAL PROFILES OF CARBON CHEMISTRY AND APPARENT OXYGEN UTILIZATION ALONG THE PRIME MERIDIAN, $4^{o}N$ - $70^{o}S$

Fig. 6 Station locations for the Long Lines (AJAX) Expedition, October, 1983 through February, 1984.

Fig.7-a Meridional distribution of the total CO_2 concentration (uM/kg) along the prime meridian, 0-1000 meters

Fig.7-b Meridional distribution of the total CO_2 concentration (uM/kg) along the prime meridian, 0-6000 meters

Fig.8-a Meridional distribution of pCO_2(uatm) in seawater at $20^{o}C$ along the prime meridian, 0-1000 meters

Fig.8-b Meridional distribution of pCO_2(uatm) in seawater at $20^{o}C$ along the prime meridian, 0-6000 meters

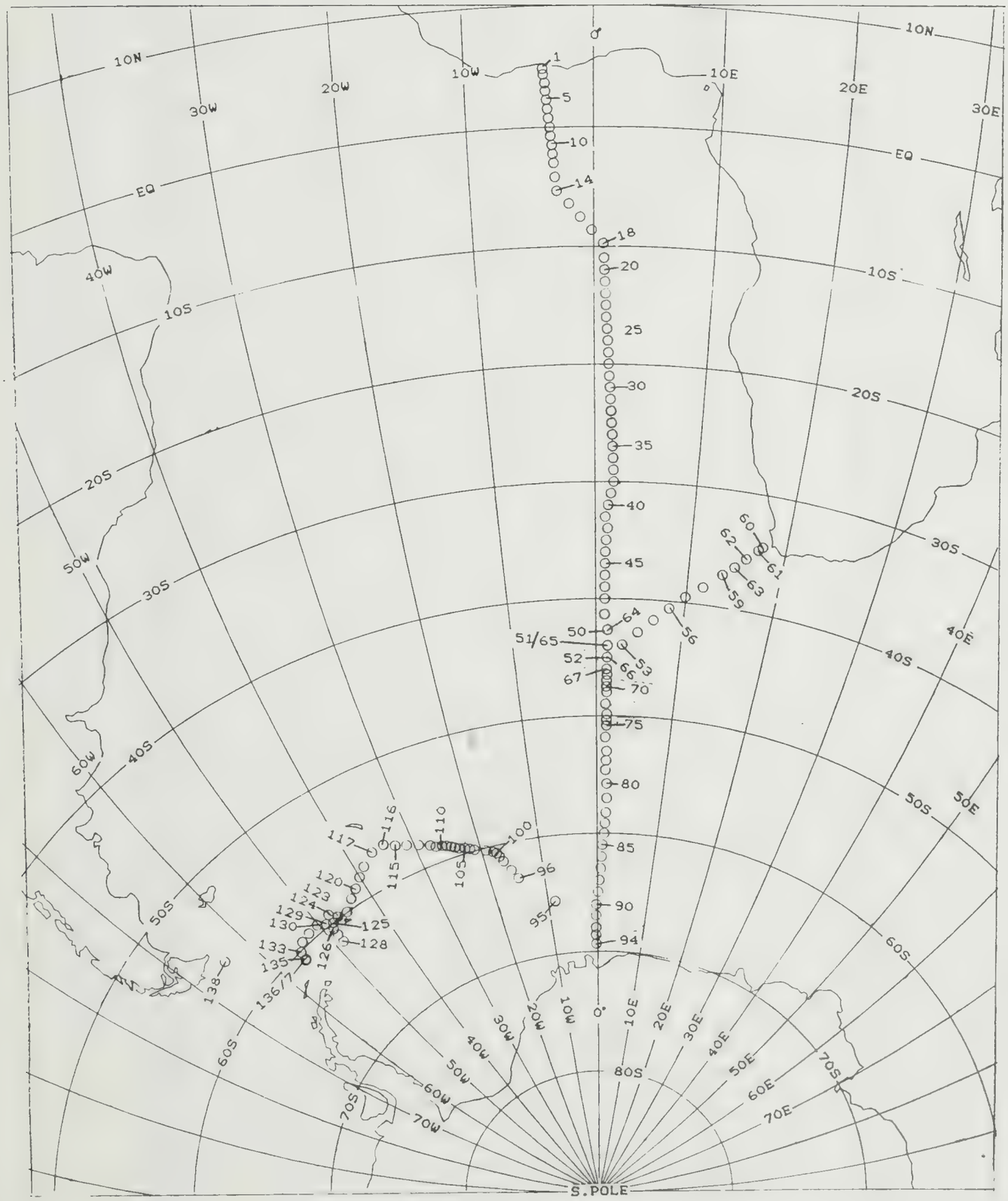
Fig.9-a Meridional distribution of the total alkalinity (ueq/kg) along the prime meridian, 0-1000 meters

Fig.9-b Meridional distribution of the total alkalinity (ueq/kg) along the prime meridian, 0-6000 meters

Fig.10-a Meridional distribution of the apparent oxygen utilization (uM/kg) along the prime meridian, 0-1000 meters

Fig.10-b Meridional distribution of the apparent oxygen utilization (uM/kg) along the prime meridian, 0-6000 meters

Fig. 6 Station locations for the Long Lines (AJAX) Expedition.



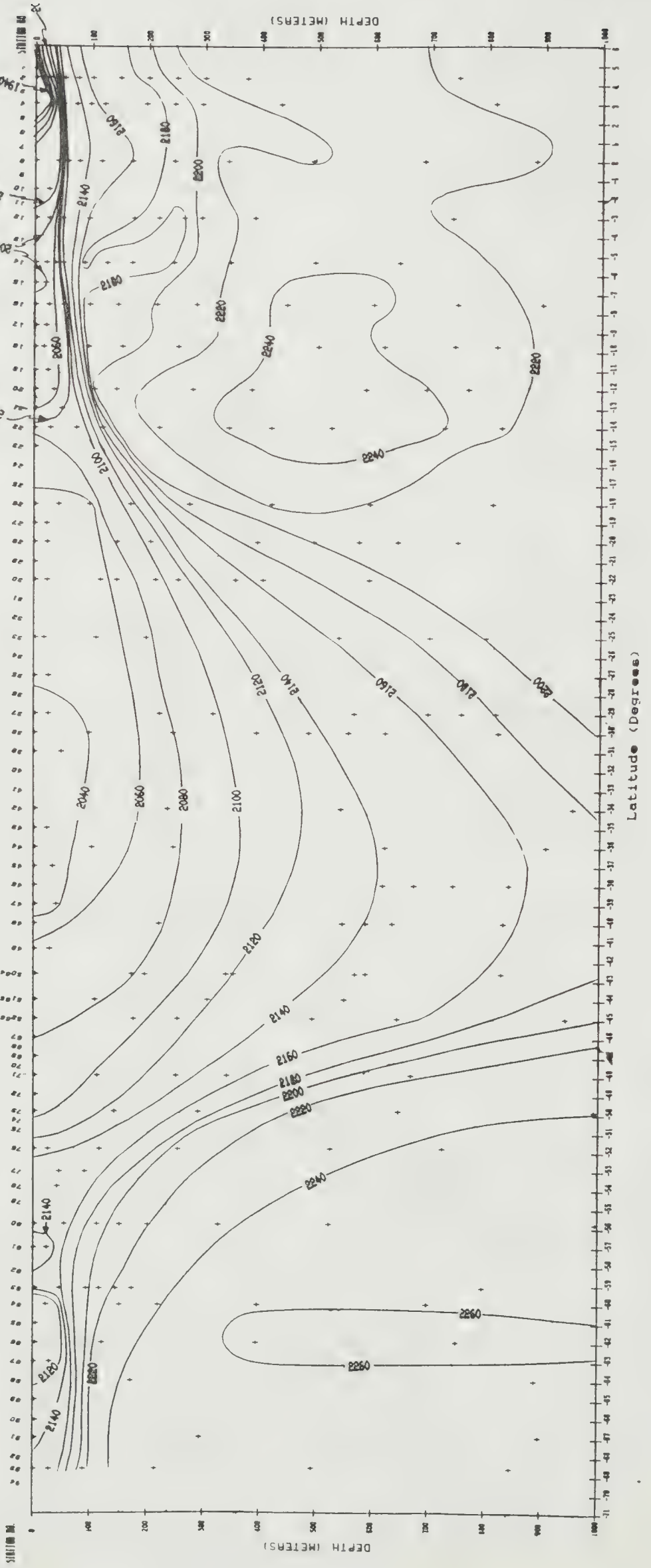
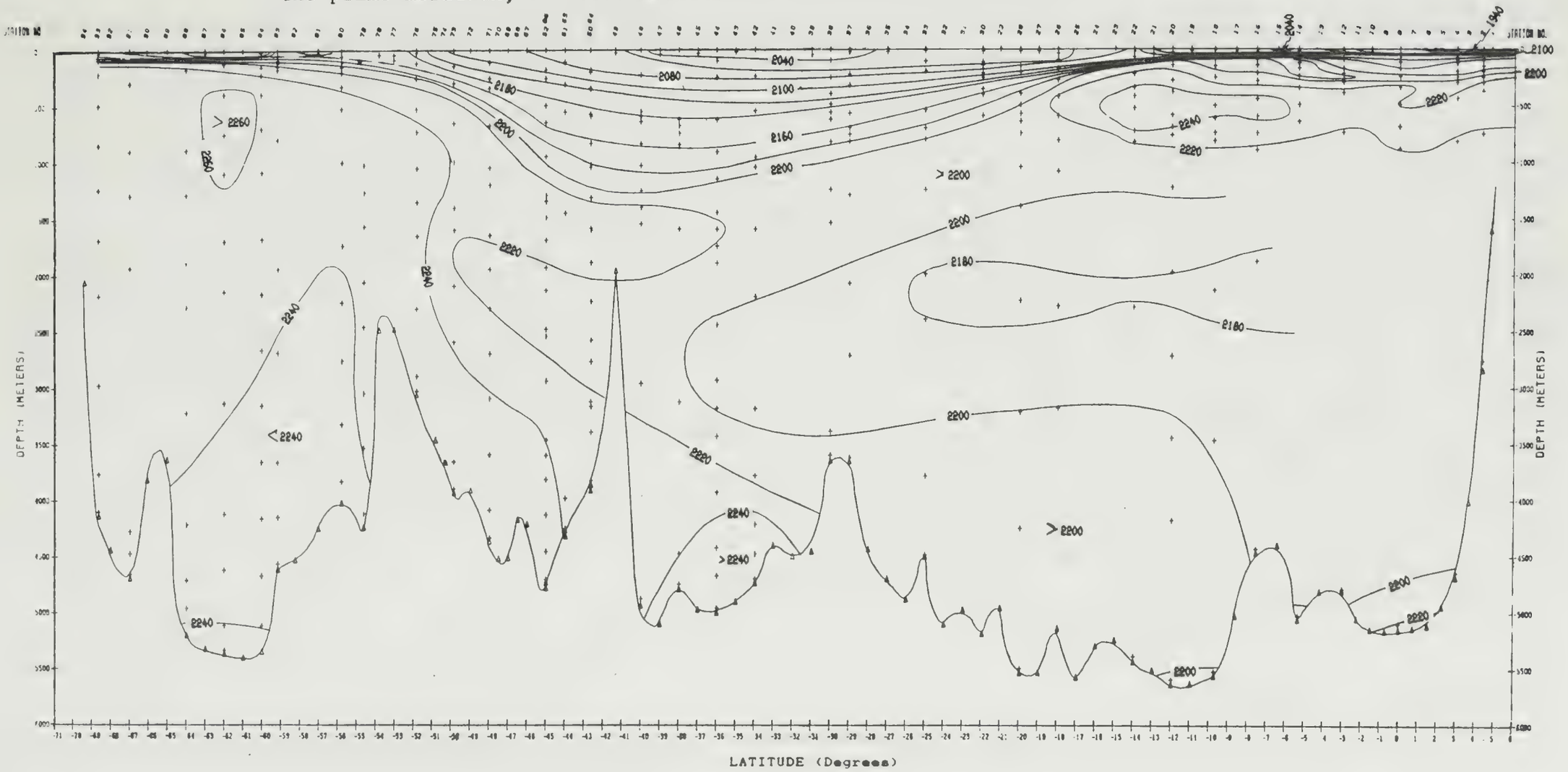


Fig. 7-a Meridional distribution of the total CO_2 concentration (uM/kg) in seawater along the prime meridian, 0 - 1000 meters.

Fig. 7-b Meridional distribution of the total CO_2 concentration (uM/kg) in seawater along the prime meridian, 0 - 6000 meters.



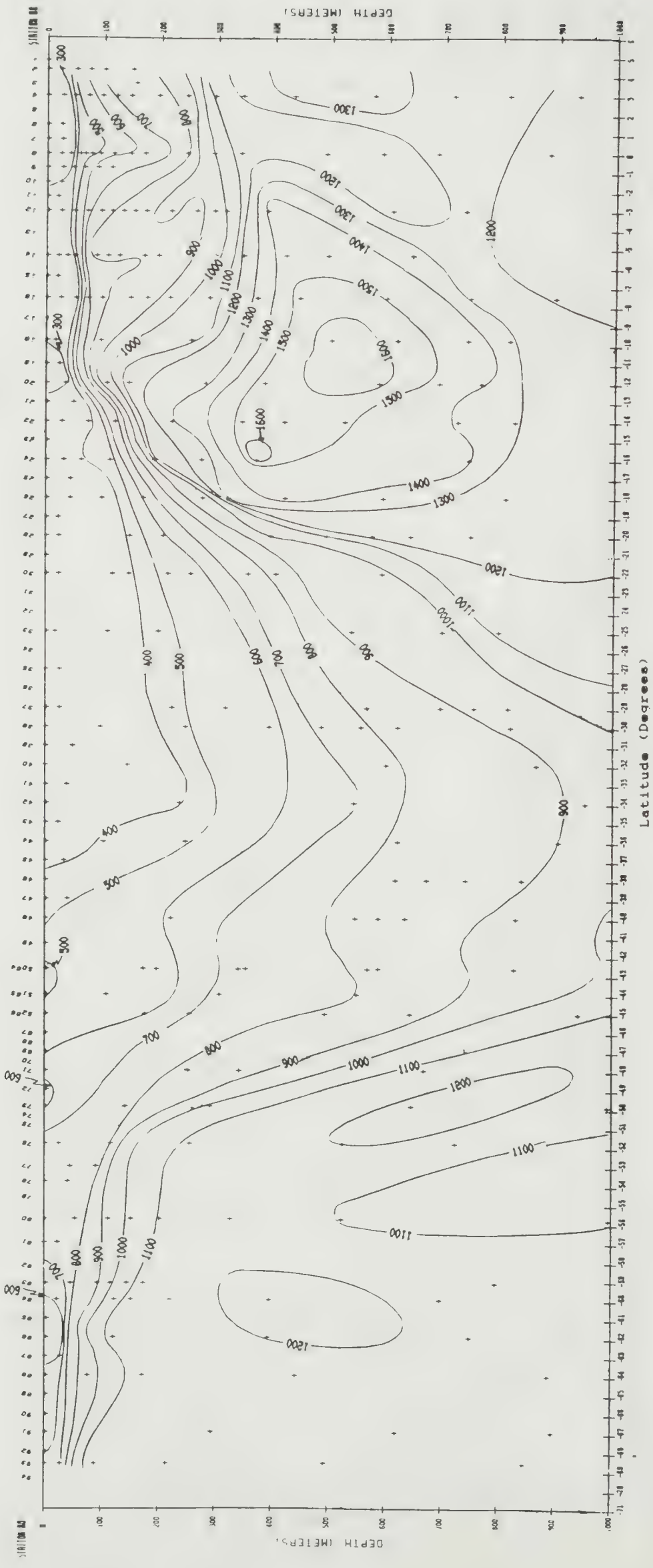


Fig. 8-a Meridional distribution along the prime meridian of pCO_2 (uatm) in seawater at 20°C, 0 - 1000 meters.

Fig. 8-b Meridional distribution along the prime meridian of pCO_2(uatm) in seawater at 20°C, 0 - 6000 meters.

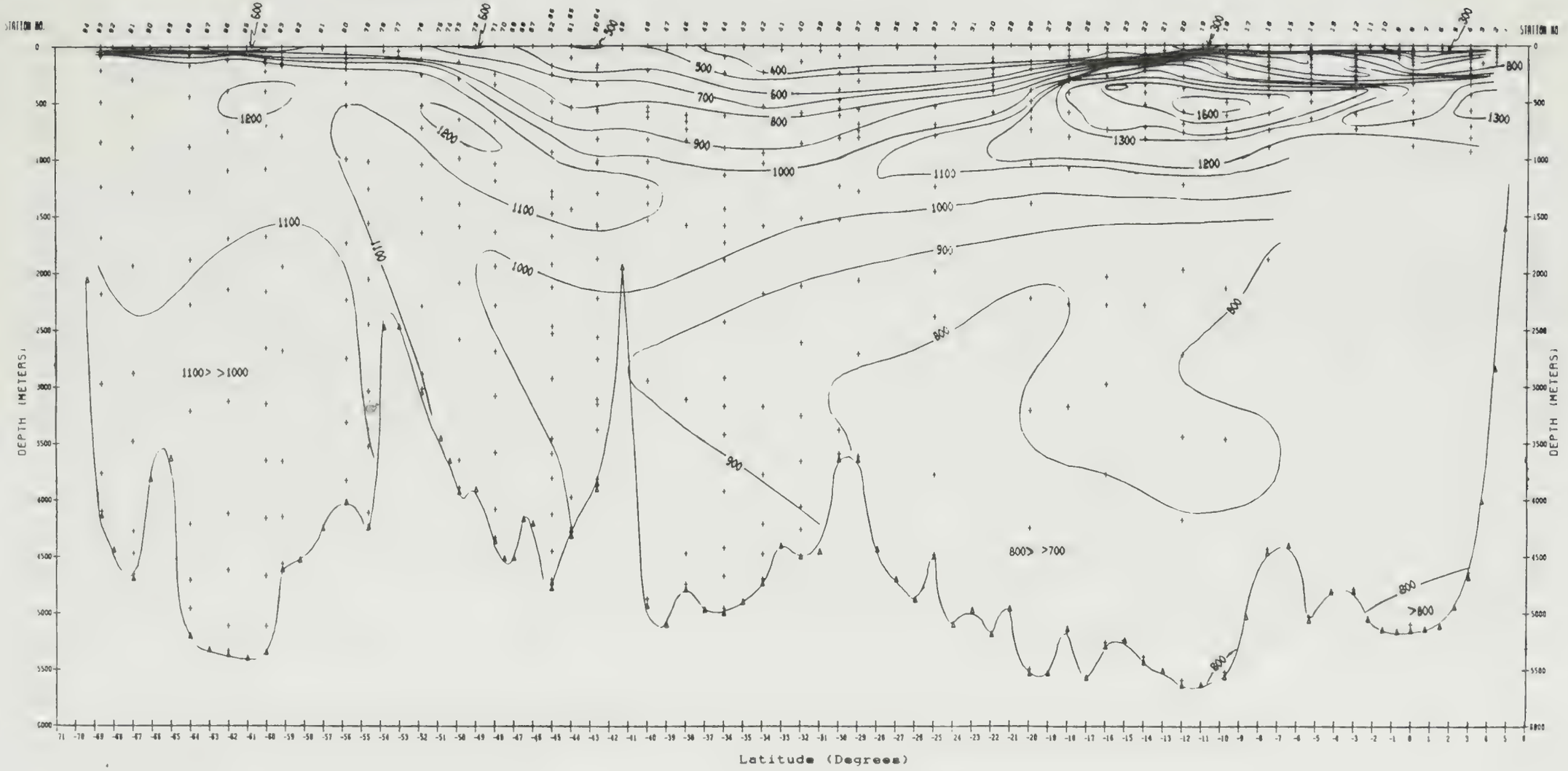


Fig. 9-a Meridional distribution along the prime meridian of the total alkalinity (ueq/kg) in seawater, 0 - 1000 meters.

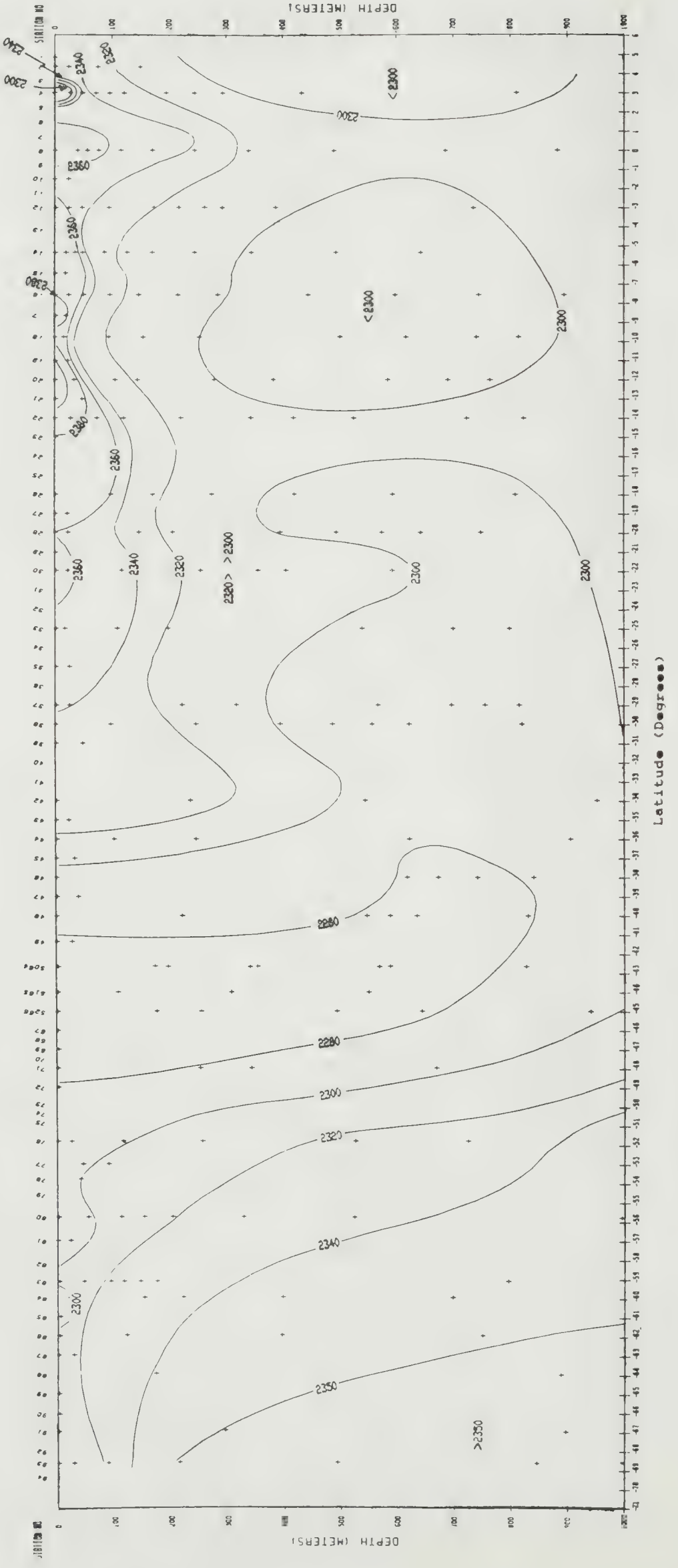


Fig. 9-b Meridional distribution along the prime meridian of the total alkalinity (ueq/kg) in seawater, 0 - 6000 meters.

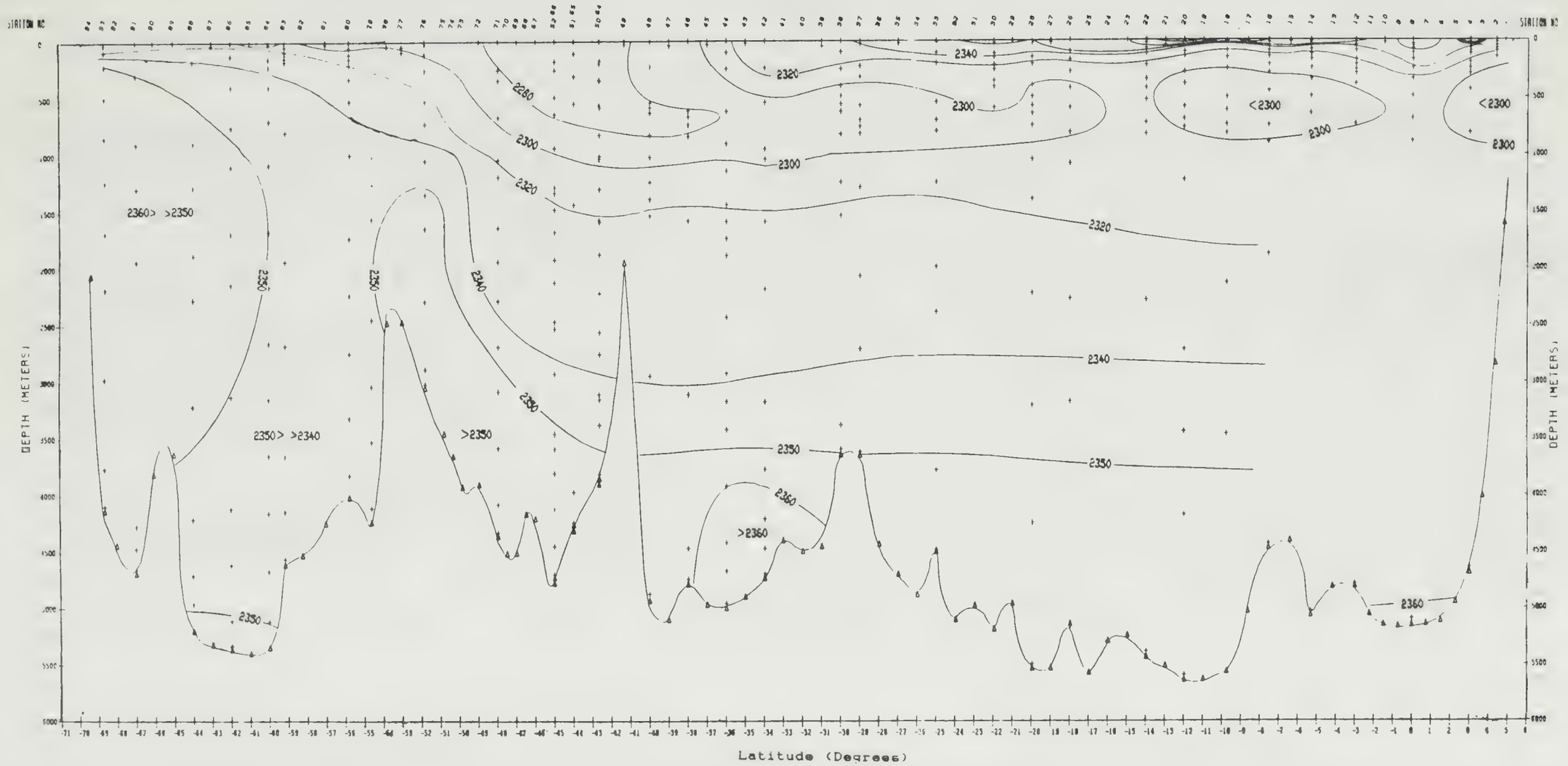
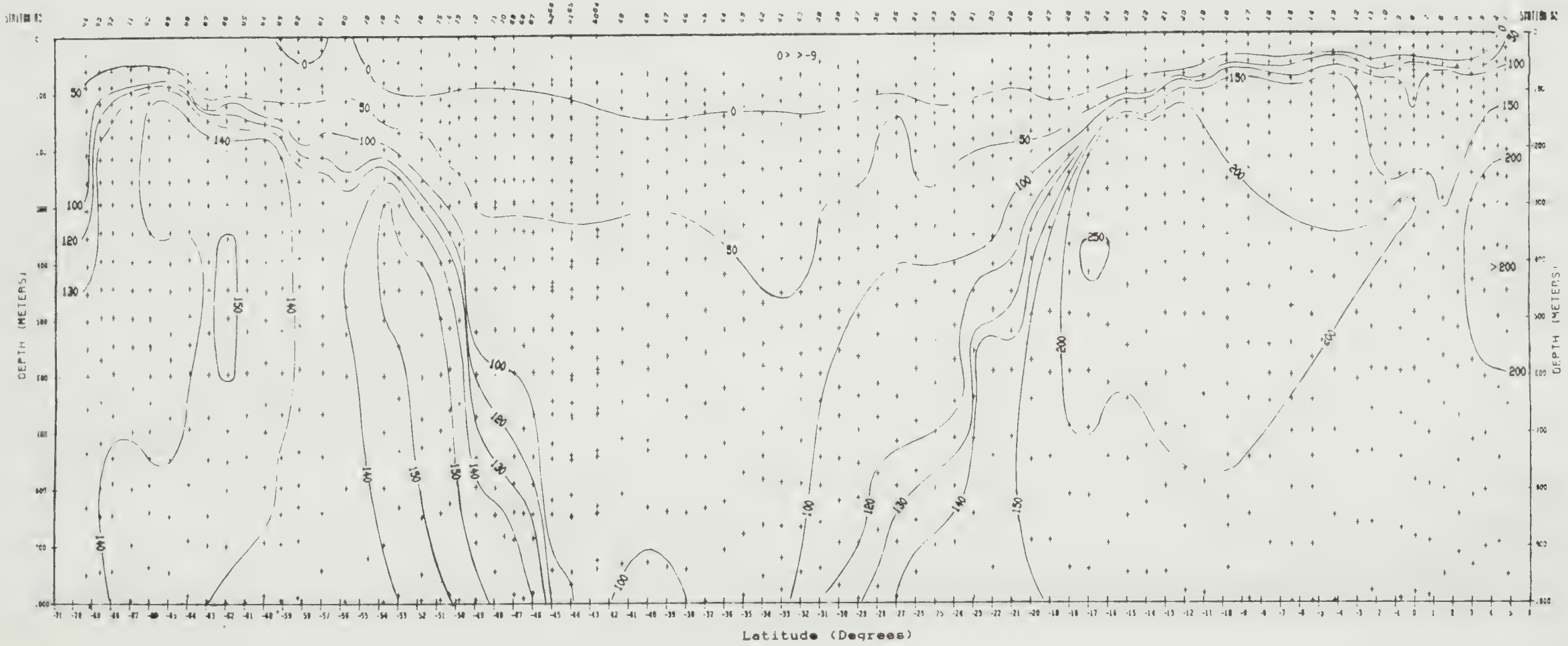


Fig. 10-a Meridional distribution along the prime meridian of the apparent oxygen utilization, AOU, in seawater (uM/kg), 0 - 1000 meters.



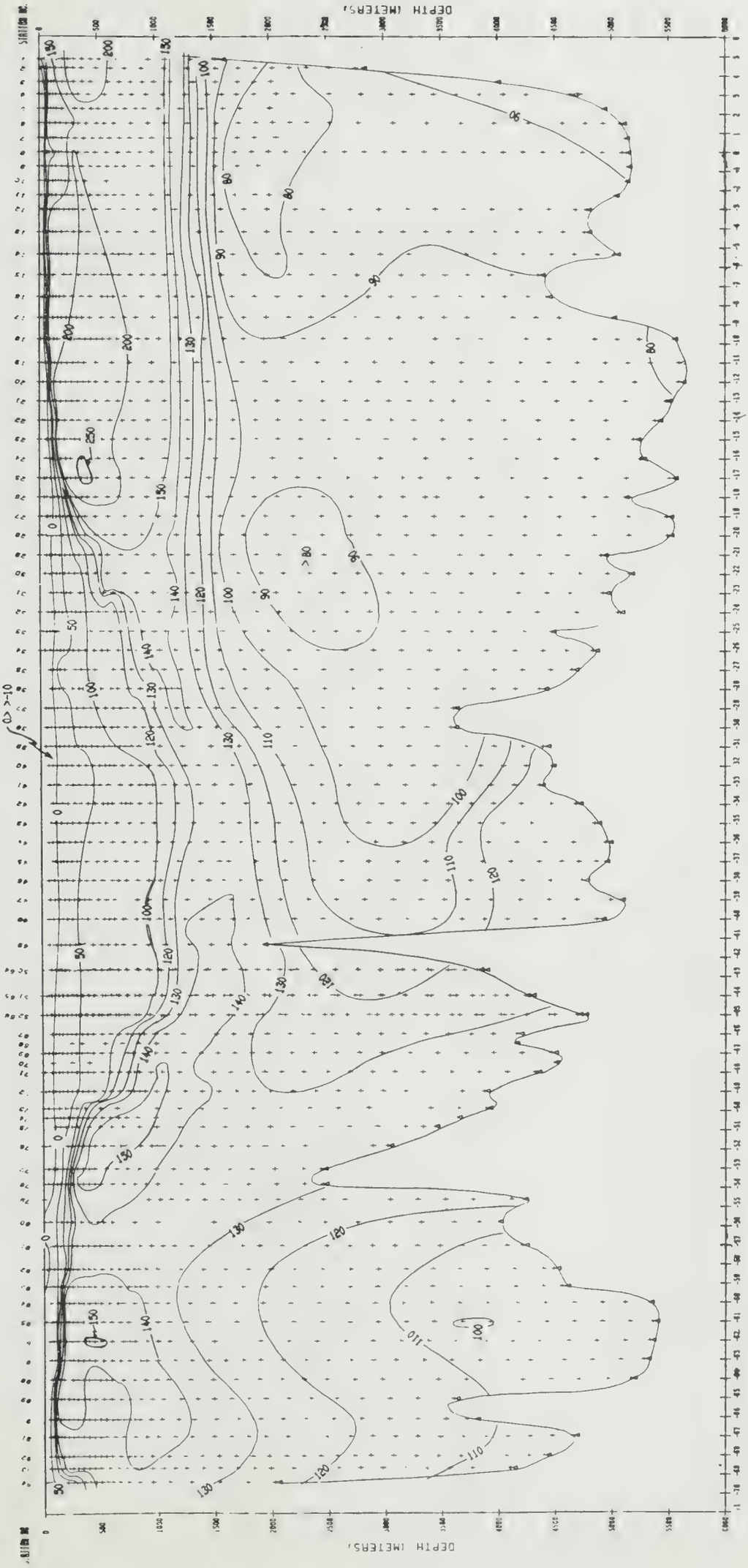


Fig. 10-b Meridional distribution along the prime meridian of the apparent oxygen utilization, AOU, in seawater (uM/kg), 0 - 6000 meters.

SECTION III

PROPERTY-PROPERTY RELATIONSHIPS OF THE LONG LINES DATA

Fig. 11 Potential temperature - Salinity

Fig. 12 Total CO_2 concentration - Potential temperature

Fig. 13 Total CO_2 concentration - Salinity

Fig. 14 pCO_2 (at in situ temperature) - Potential temperature

Fig. 15 pCO_2 (at in situ temperature) - Salinity

Fig. 16 Total Alkalinity - Potential temperature

Fig. 17 Total Alkalinity - Salinity

Fig. 18 pCO_2 (at $20^{\circ}C$) - Total CO_2 concentration

Fig. 19 pCO_2 (at $20^{\circ}C$) - Apparent oxygen utilization

Fig. 20 Apparent oxygen utilization - Total CO_2 concentration

Fig. 21 Nitrate concentration - Total CO_2 concentration

Fig. 22 Phosphate concentration - Total CO_2 concentration

Fig. 23 Total alkalinity - Total CO_2 concentration

Fig. 24 Silica concentration - Total alkalinity

Fig. 25 Nitrate concentration - Phosphate concentration

Fig. 26 Silica concentration - Nitrate concentration

Fig. 11 Potential temperature versus salinity

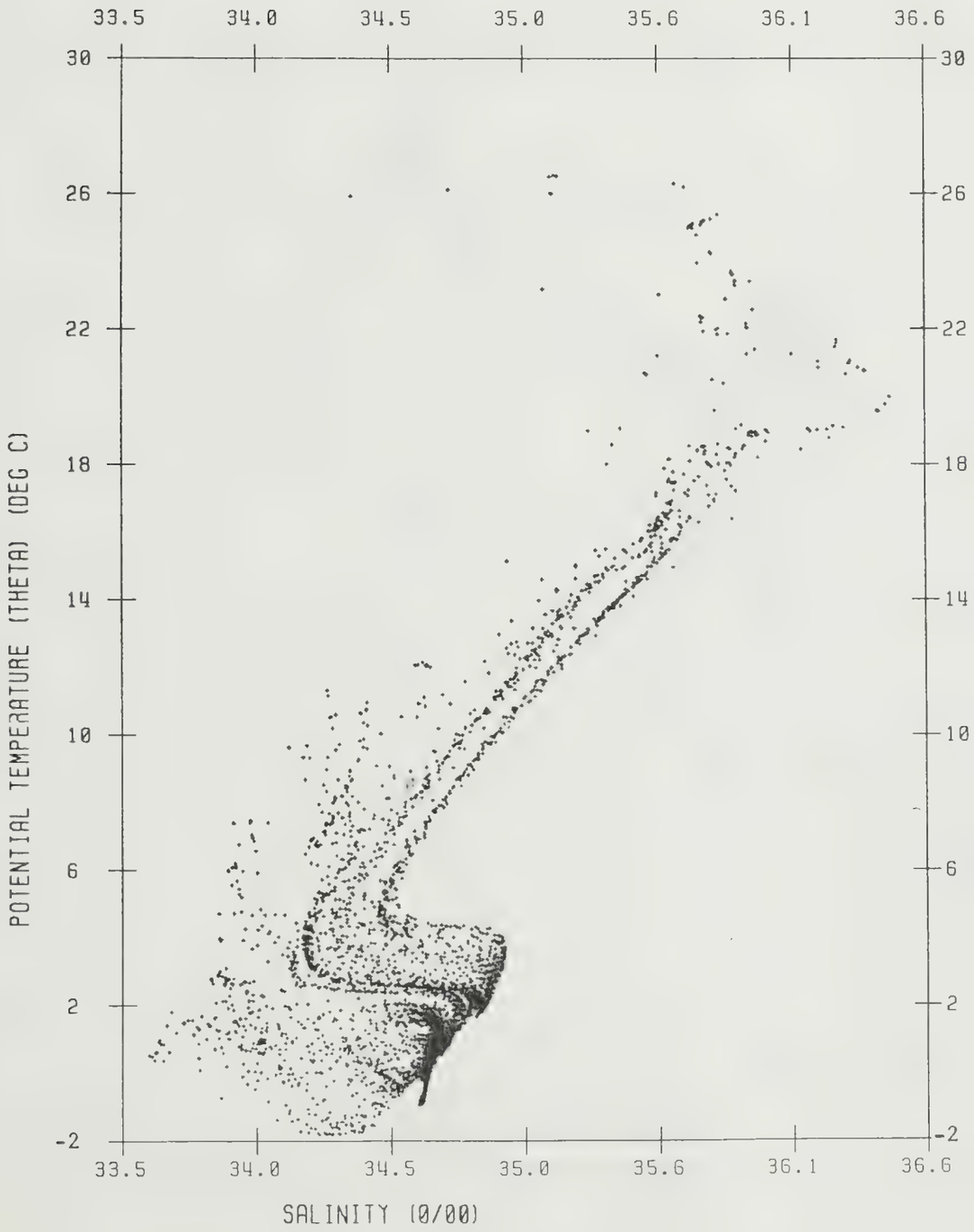


Fig. 12 Total CO_2 concentration versus potential temperature

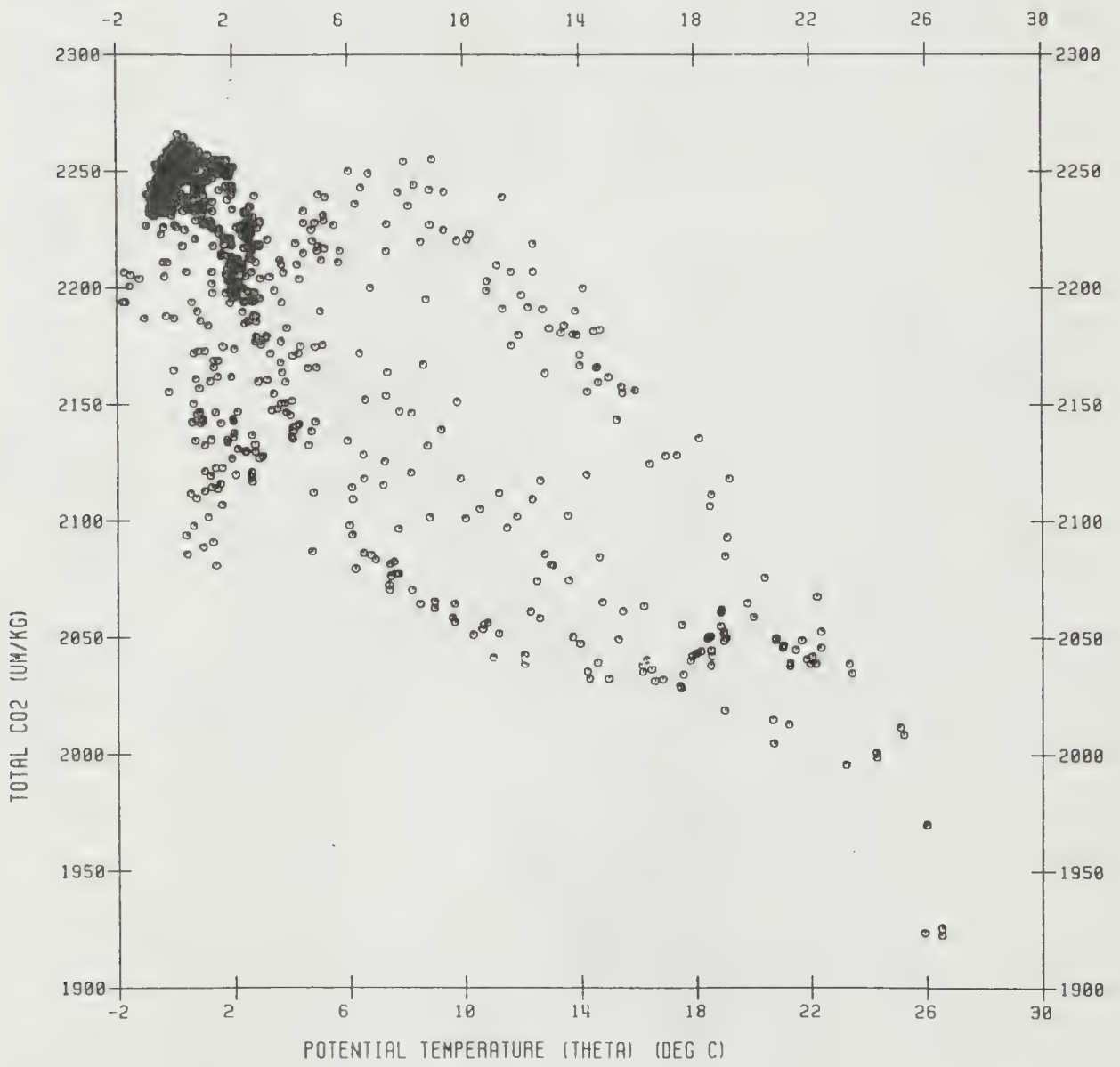


Fig. 13 Total CO_2 concenrtation versus salinity

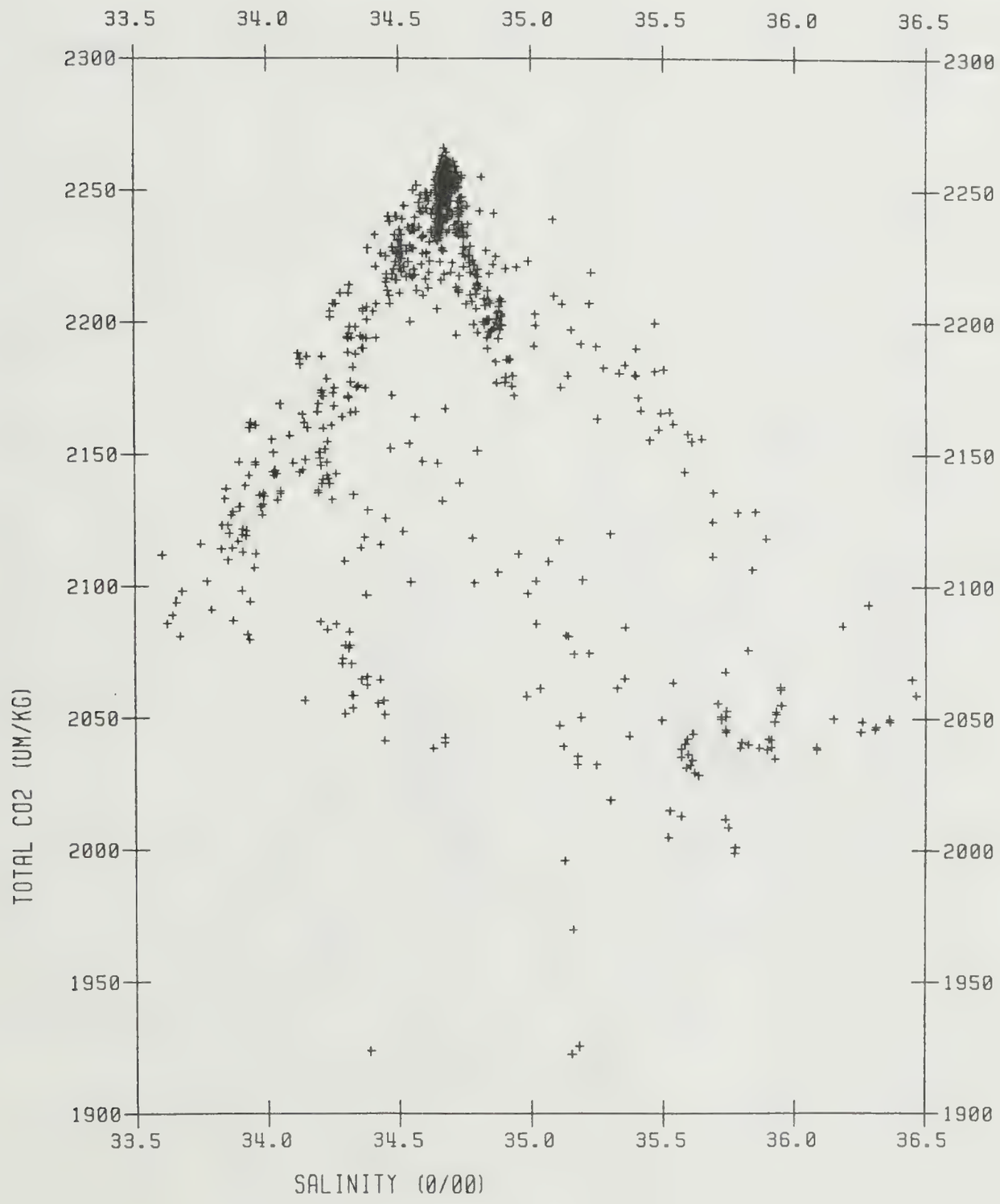


Fig. 14 pCO_2(at in situ temperature) versus potential temperature

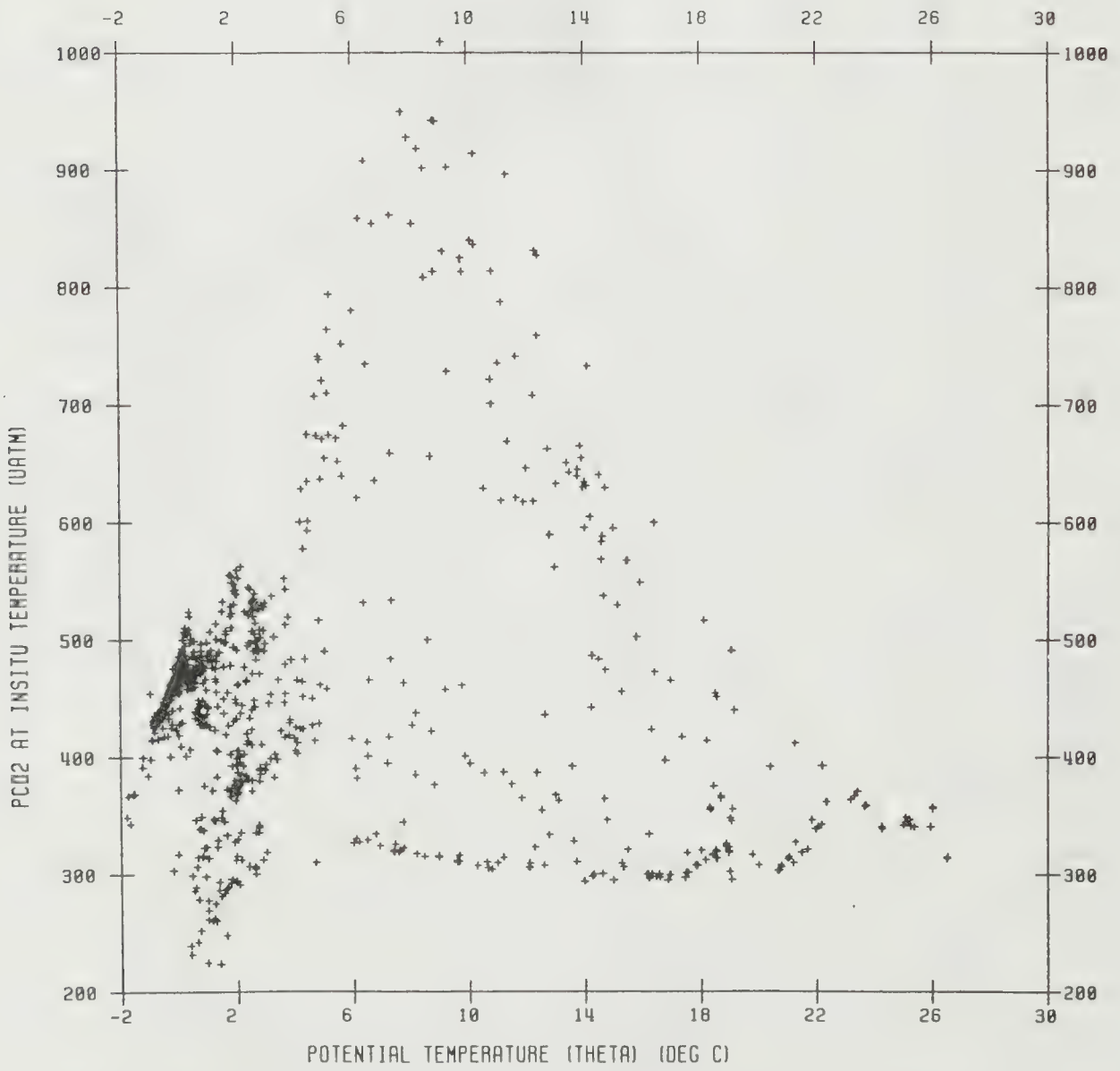


Fig. 15 pCO_2(at in situ temperature) versus salinity

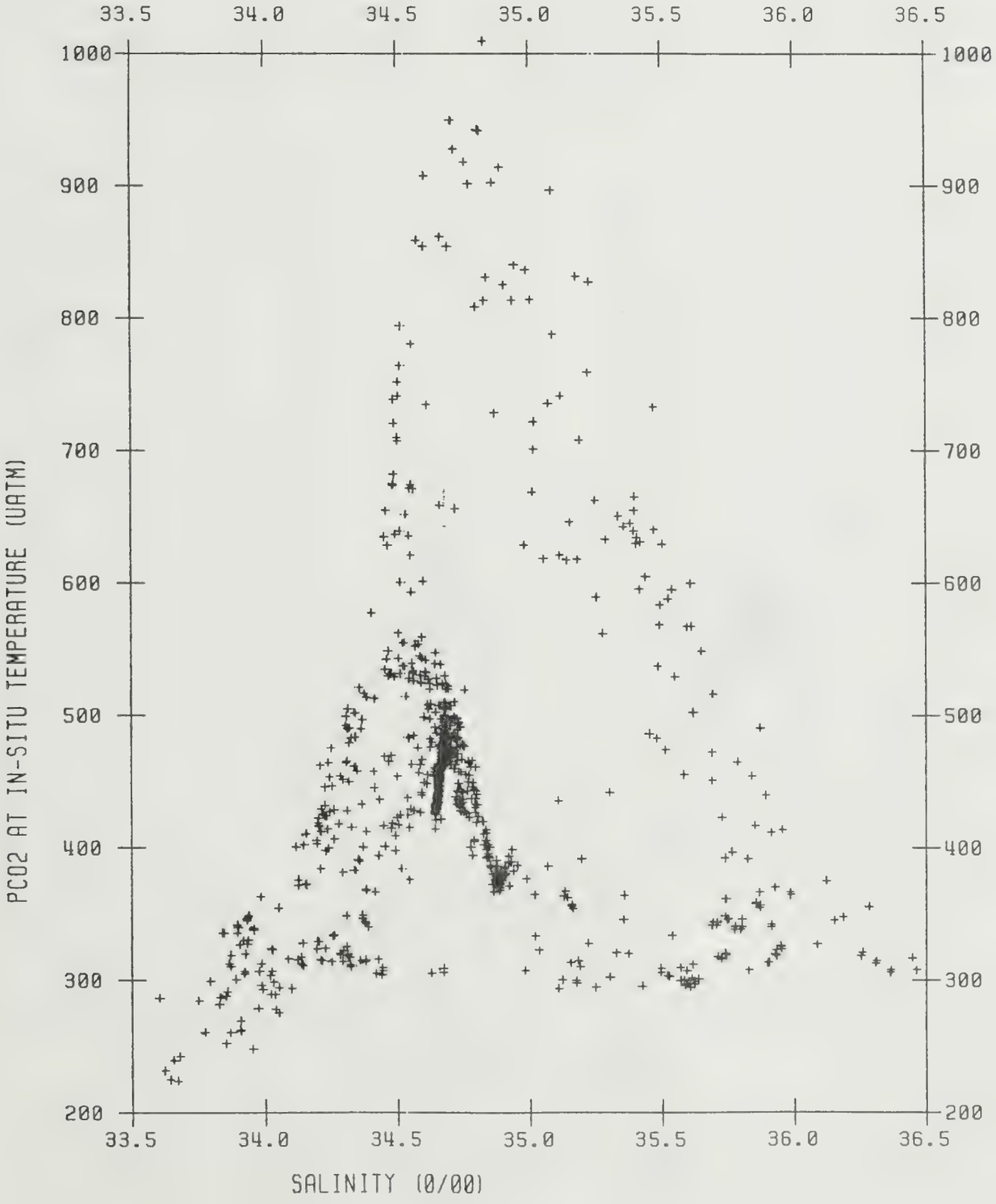


Fig. 16 Total alkalinity versus potential temperature

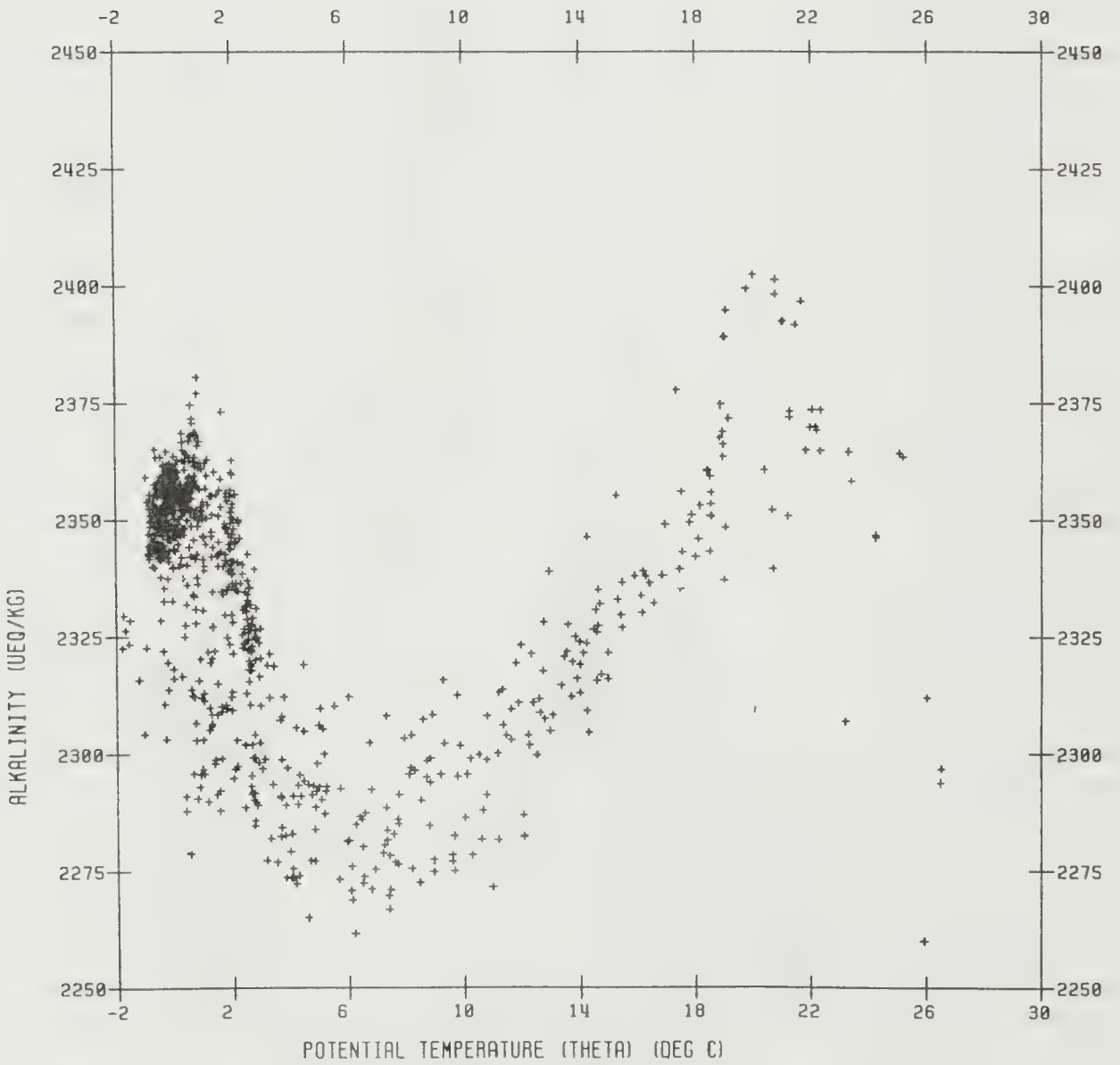


Fig. 17 Total alkalinity versus salinity

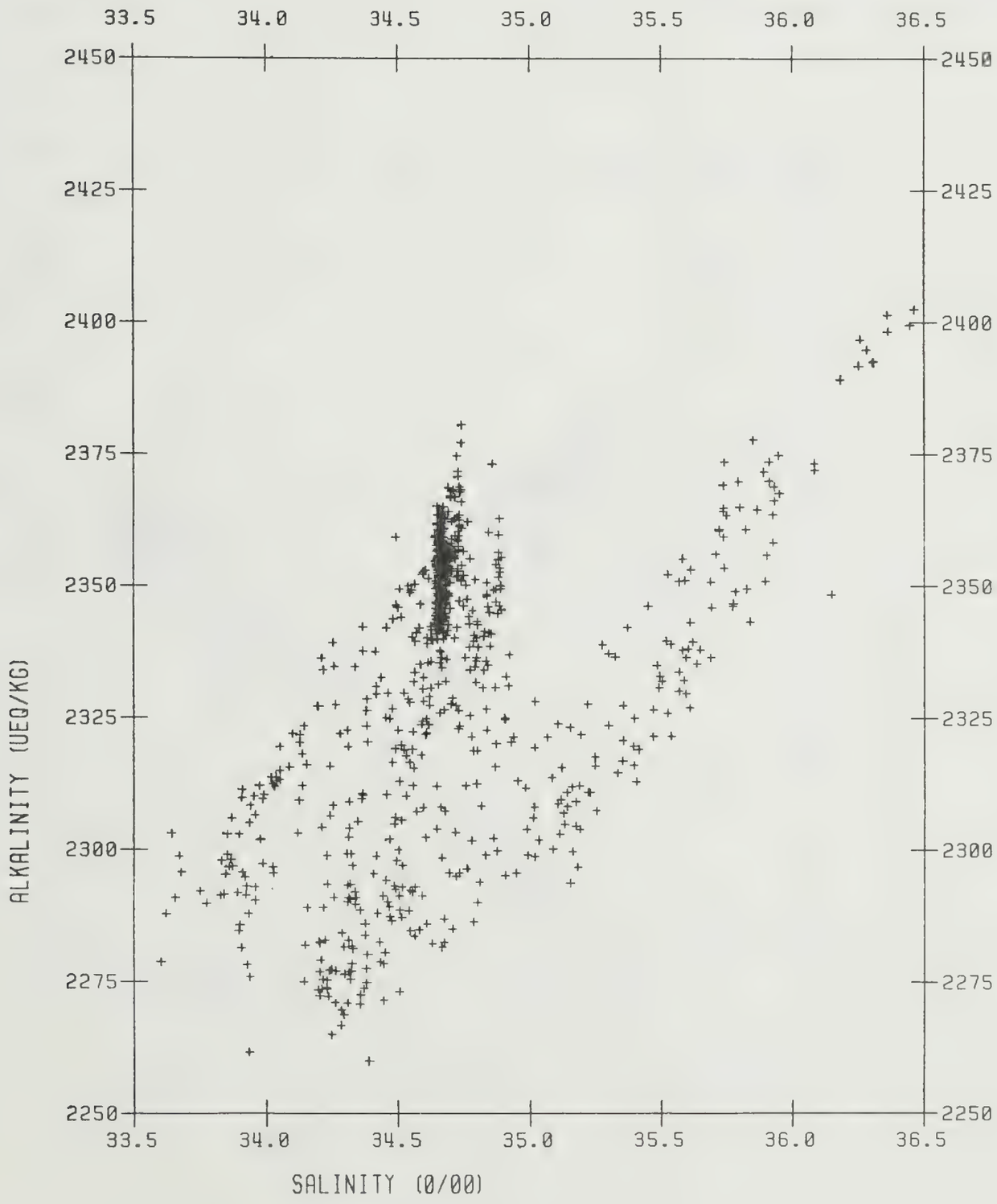


Fig. 18 pCO_2(at 20°C) versus total CO_2 concentration

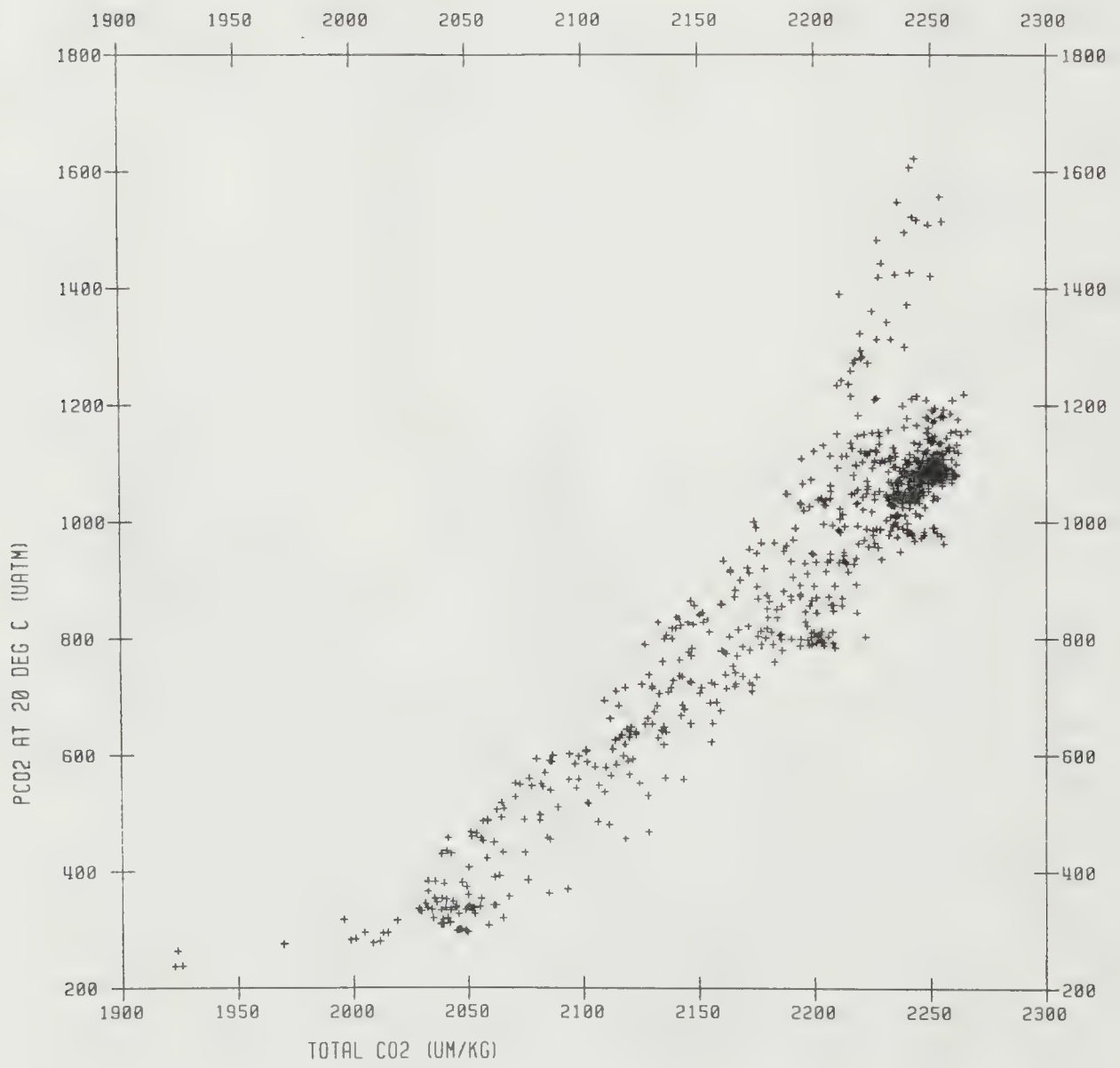


Fig.19 pCO_2(at 20°C) versus apparent oxygen utilization

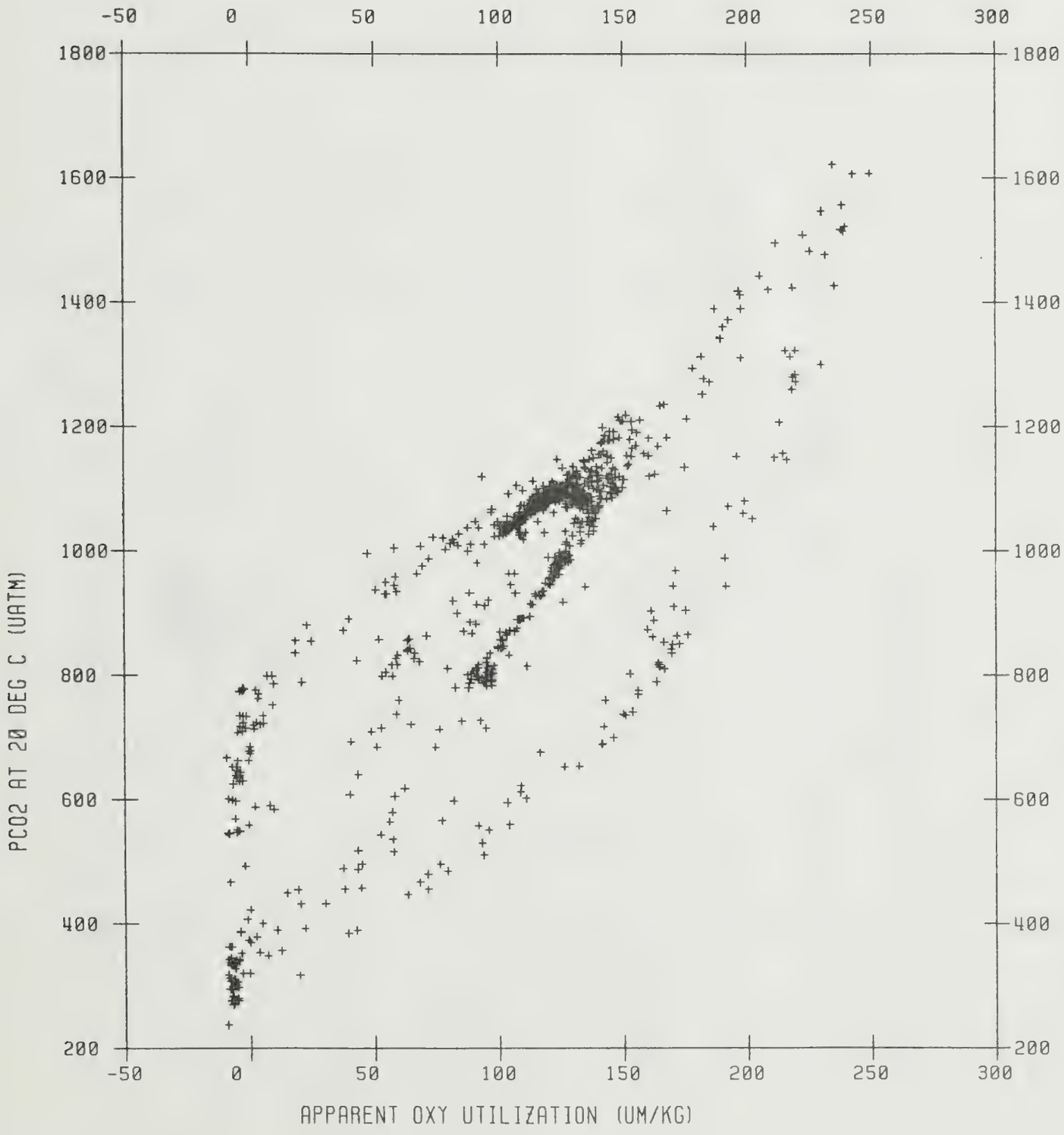


Fig.20 Apparent oxygen utilization versus total CO_2 concentration

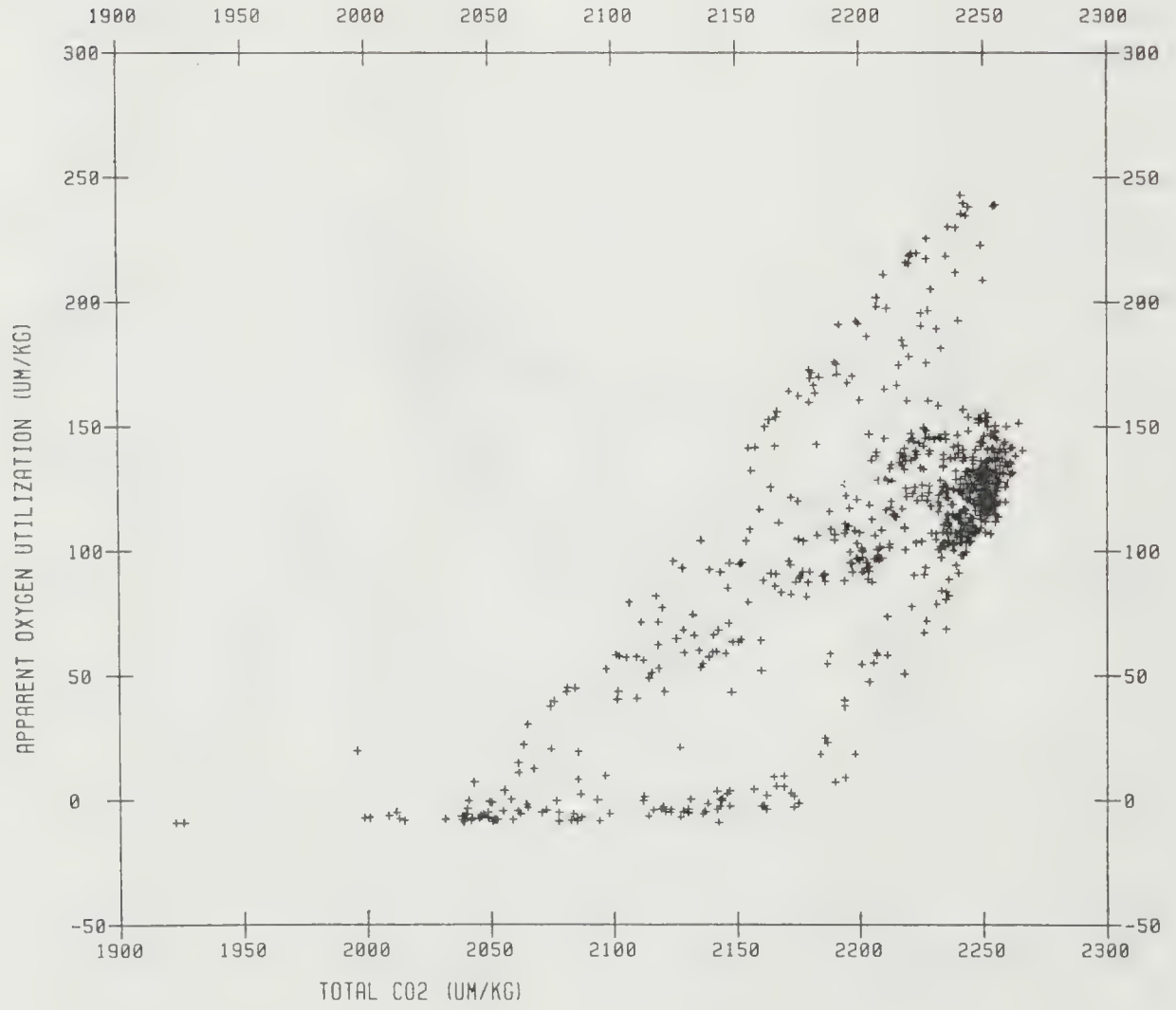


Fig. 21 Nitrate concentration versus total CO_2 concentration

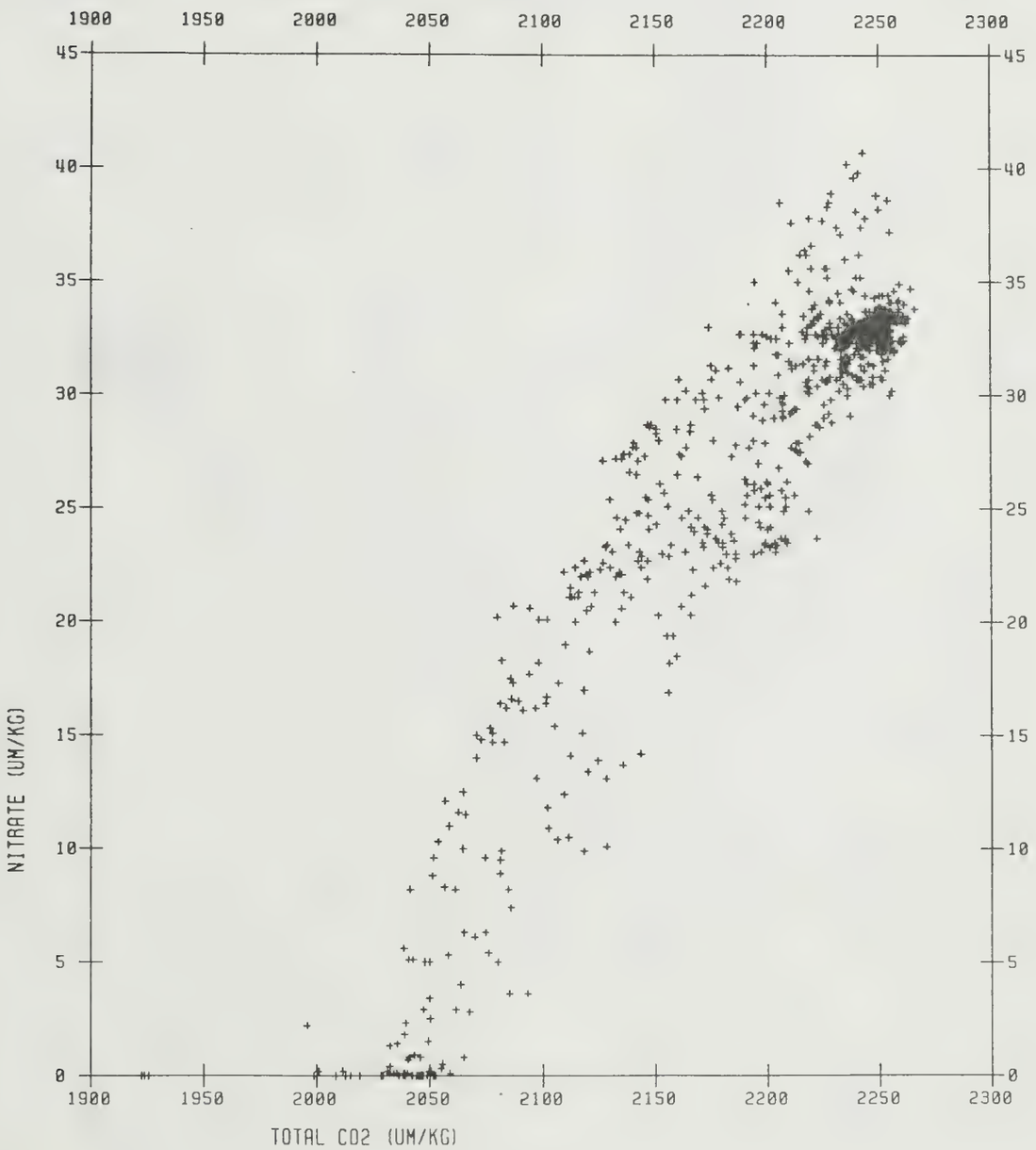


Fig. 22 Phosphate concenrtation versus total CO_2 concentration

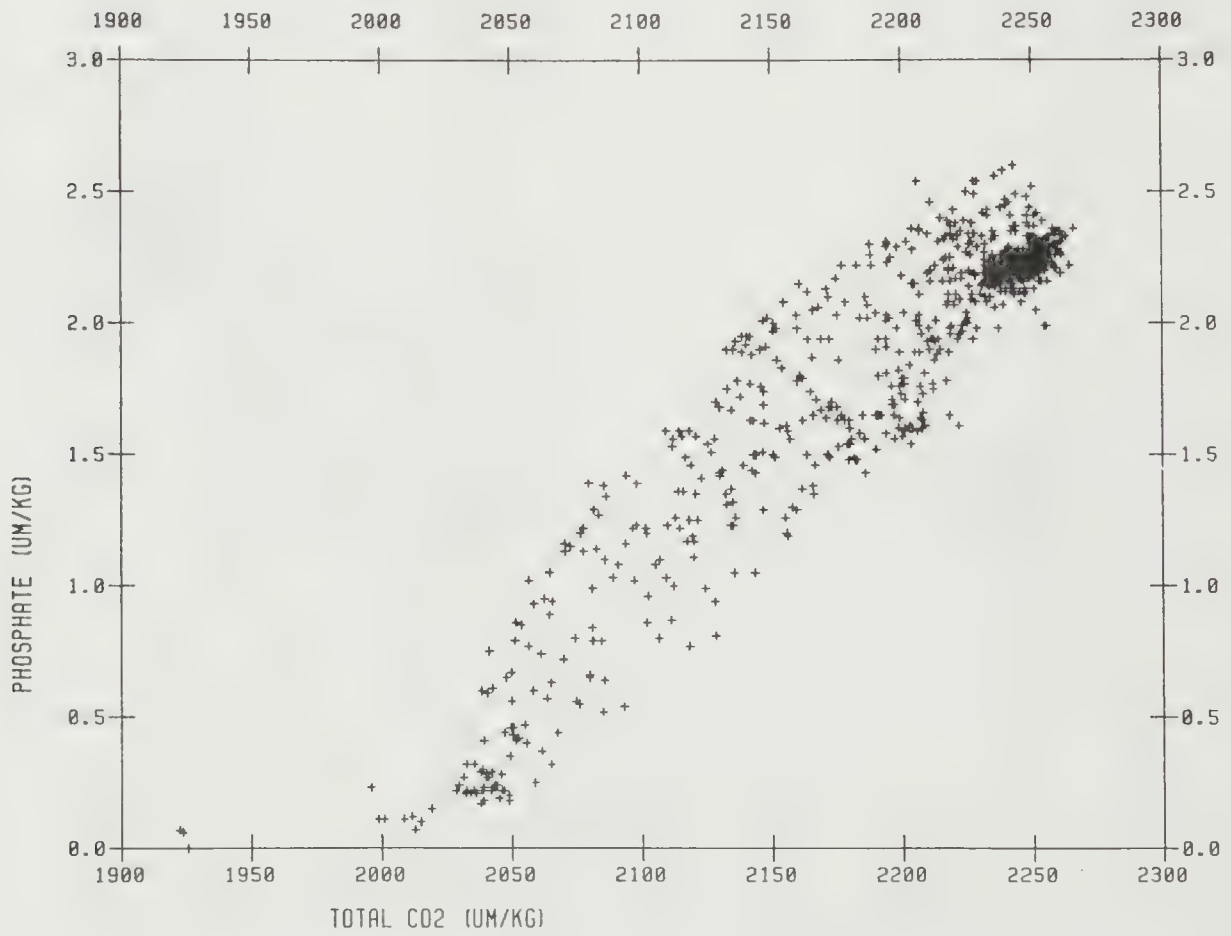


Fig. 23 Total alkalinity versus total CO_2 conentration

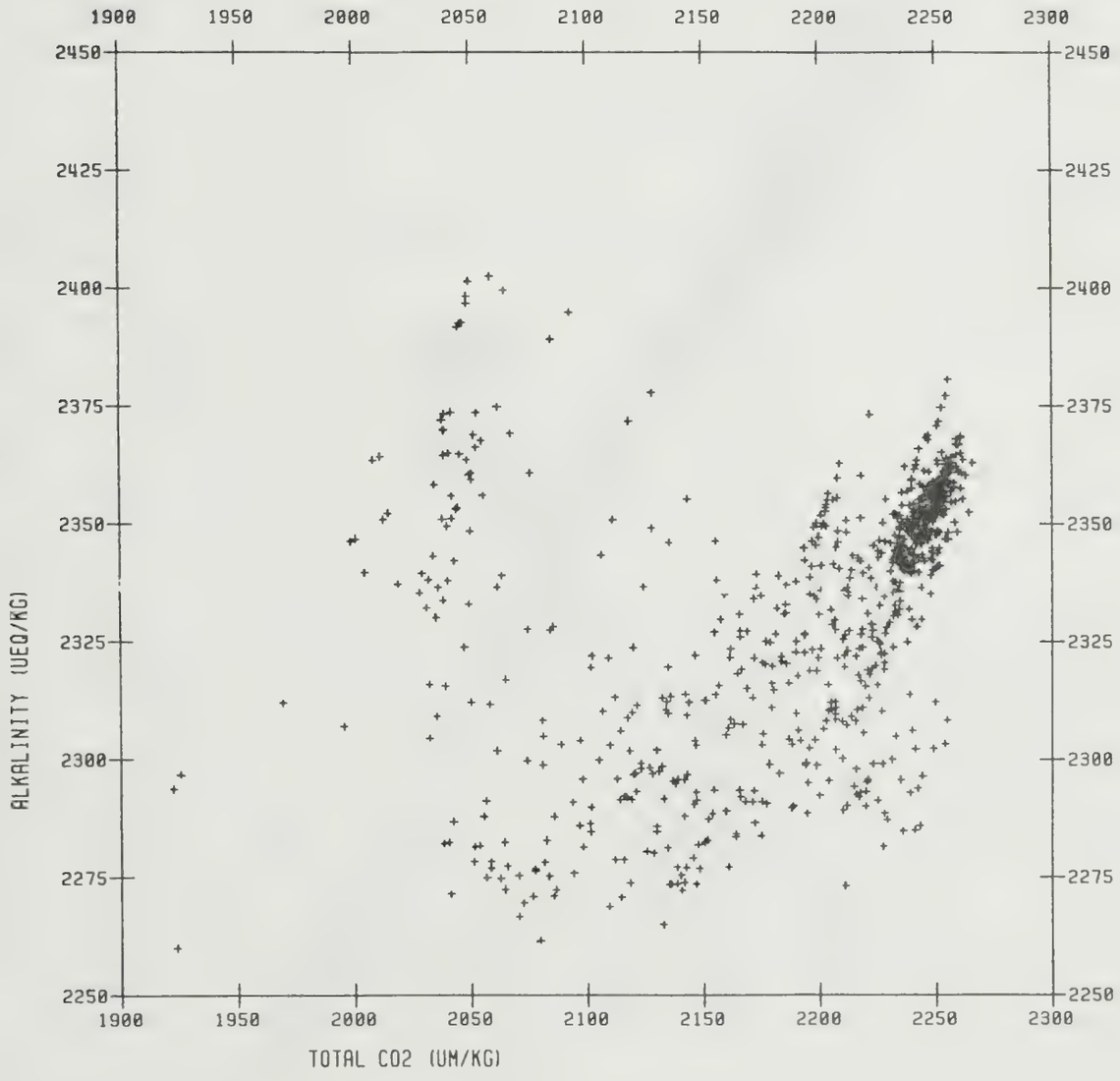


Fig. 24 Silica concentration versus total alkalinity

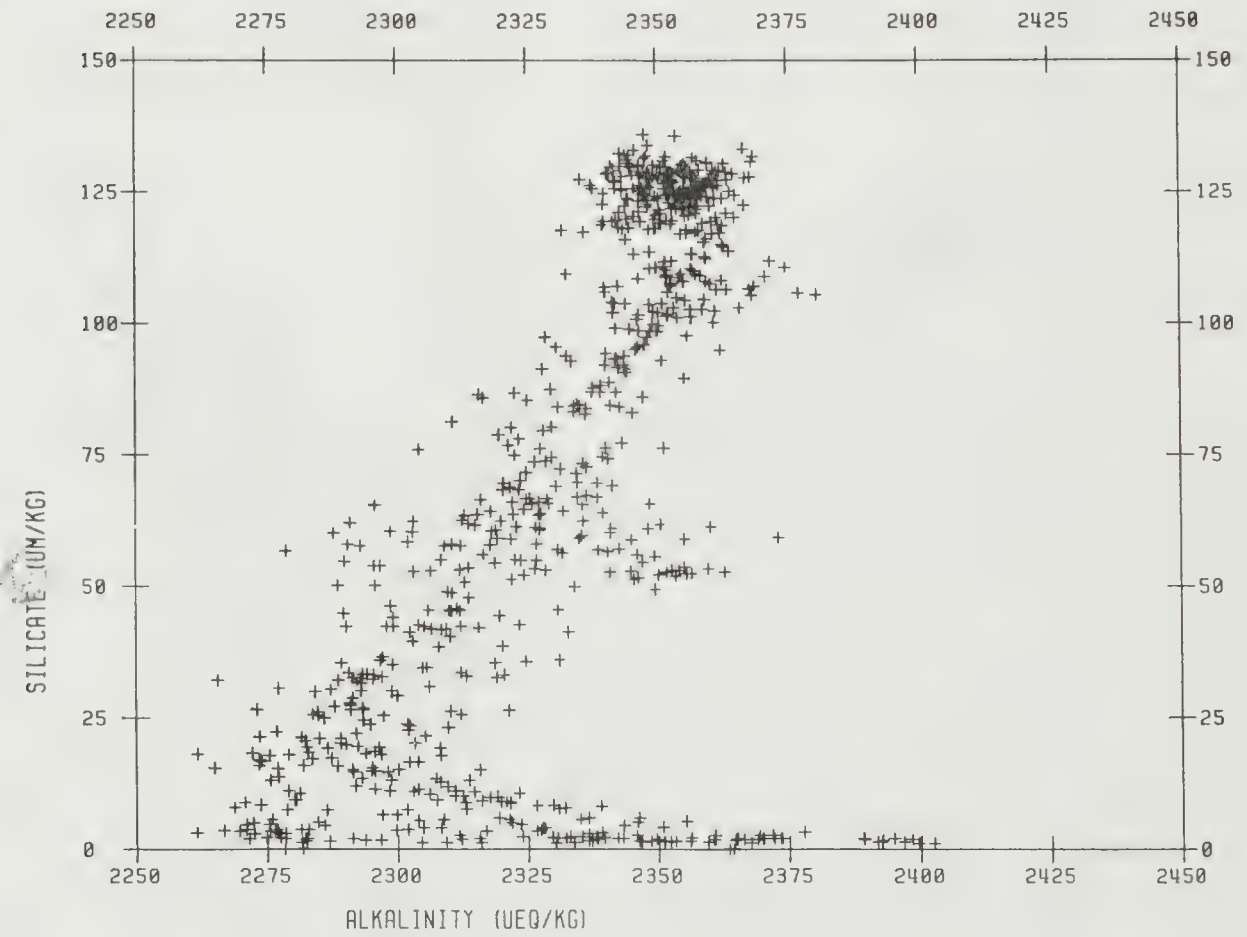


Fig. 25 Nitrate concentration versus phosphate concentration

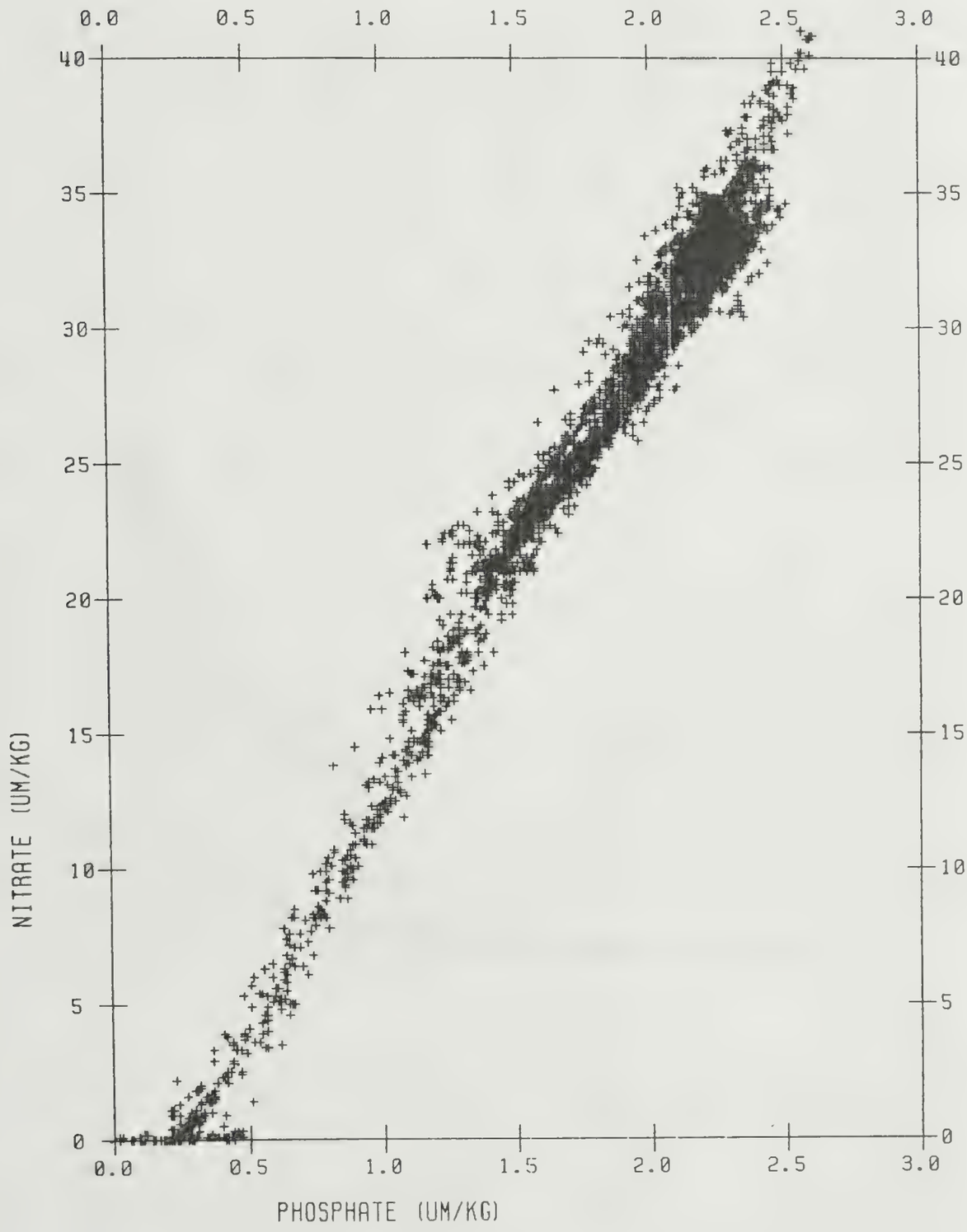
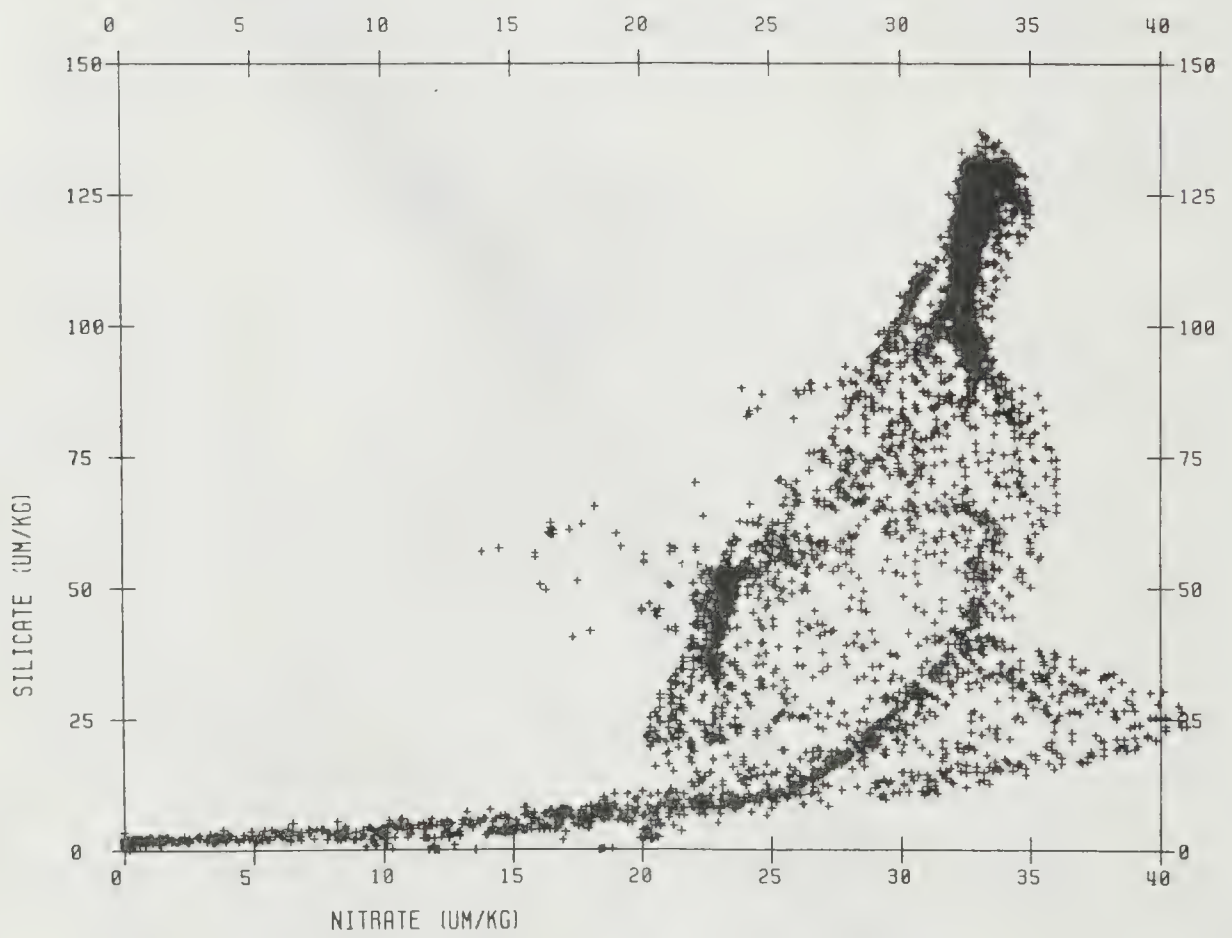


Fig. 26 Silica concentration versus nitrate concentration



SECTION IV

LONG-LINES (AJAX) SOUTH ATLANTIC AND SOUTHERN OCEAN CARBONATE CHEMISTRY DATA

The following table represents data measured or computed based on measured values from the 1983-84 Long Lines (AJAX) Expedition, October-November 1983 and January-February 1984, on board the R/V KNORR. With the exception of the carbonate chemistry parameters (pCO_2, TCO_2 and TALK), all of the data were obtained by the Physical and Chemical Oceanographic Data Facility (PACODF) of Scripps Institution of Oceanography (see "Physical, Chemical and in-situ CTD Data from the AJAX Expedition in the South Atlantic Ocean", SIO Reference 85-24 and TAMU Reference 85-4-D, 275 pp., 1985).

The carbonate chemistry data obtained by the Lamont-Doherty Geological Observatory group consist of the partial pressure of CO_2 in seawater (pCO_2) (measured at a constant temperature of 20.00 °C) and the total dissolved carbon dioxide concentration in seawater (TCO_2). The TCO_2 data are represented in micromoles per kilogram (uM/kg). The partial pressure of CO_2 in seawater at 20.00 °C (rather than at in situ or potential temperature) is expressed in microatmospheres (uatm). The partial pressure of CO_2 at another temperature, T1, can be computed by using the following equation:

$$pCO_2(T1) = pCO_2(T=20^oC) \exp ((T1-20) \times 0.043)$$

In addition to the observed quantities pCO_2 and TCO_2, the table includes the computed quantity TALK (total alkalinity), in microequivalents per kilogram (uEq/kg), and apparent oxygen utilization (AOU), in micromoles per kilogram (uM/kg). TALK is computed from the observed pCO_2, TCO_2 (GC determination only), salinity, silica (SiO_3) and phosphate (PO_4) concentrations, using the computer subroutine given in Appendix A. In a few cases TALK appears in the table in spite of the absence of pCO_2 and/or nutrient concentration values; in these cases a second Niskin sampler was tripped at the same depth and the values for the missing parameters are taken from the companion sampler. Data for the second sampler will normally be found on the immediately preceding or following line in the table. AOU has been computed by:

$$AOU = O_2(sat.,\theta) - O_2(obs.),$$

where $O_2(sat.,\theta)$ is the concentration of oxygen the water would have at its potential temperature if saturated with air, and $O_2(obs.)$ is the measured concentration of oxygen in the sample, both expressed in uM/kg. The value for $O_2(sat.,\theta)$ is computed using the solubility data of Weiss (1970).

The computed quantities "potential temperature", "sigma-theta", "sigma-2" and "sigma-4" have been calculated from the observed values of temperature, salinilty and pressure using the UNESCO International Equation of State for Seawater (Millero et al., 1980), and the adiabatic temperature gradient expression of Fofonoff (1977), based on the results of Bryden (1973).

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Fofonoff, N.P., 1977, Computation of potential temperature of seawater for an arbitrary reference pressure. Deep-Sea Res., 24, 489-491.

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Weiss, R.F., 1970, The solubility of nitrogen, oxygen and argon in water and seawater. Deep-Sea Res., 17, 721-735.

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 29-DEC-86

Leg 1 Station 1 Latitude 4-49.7 N Longitude 3-57.8 W Date 10/ 7/83 Bottom Depth 1580 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20°C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
125	1	1	26.011	26.011	35.159	23.152	31.434	39.362						276.	1970.	2312.	
126	1	1	26.010	26.010	35.158	23.152	31.433	39.362						275.	1970.	2213.	
127	1	1	26.013	26.013	35.157	23.150	31.432	39.360									
128	1	1	26.012	26.012	35.158	23.151	31.433	39.361									
129	1	1	26.002	26.002	35.161	23.156	31.438	39.367	174	29.	1.5	0.14	0.0				
130	27	27	23.028	23.022	35.574	24.364	32.719	40.717	140	73.	2.6	0.48	5.3				
131	49	48	18.054	18.046	35.842	25.907	34.408	42.542	138	94.	4.6	0.88	11.7				
132	67	67	17.570	17.559	35.832	26.019	34.536	42.685	127	107.	5.3	1.04	14.2				
133	88	87	16.458	16.444	35.689	26.176	34.732	42.918									
134	106	106	16.028	16.011	35.652	26.248	34.819	43.019									
135	157	156	14.741	14.717	35.515	26.432	35.051	43.296	107	141.	8.5	1.40	20.2				
136	207	206	13.706	13.676	35.374	26.545	35.204	43.486	79	175.	10.4	1.62	24.8				
137	255	254	11.536	11.503	35.122	26.778	35.525	43.890	54	212.	14.3	2.01	31.6				
138	305	303	10.117	10.081	34.958	26.906	35.714	44.135	55	220.	16.6	2.16	34.2				
139	380	378	8.854	8.813	34.830	27.015	35.880	44.354	62	221.	19.2	2.28	35.8				
140	456	453	7.906	7.860	34.736	27.088	35.996	44.511	76	213.	20.9	2.37	36.6				
141	529	526	7.063	7.012	34.656	27.146	36.095	44.648	92	203.	22.4	2.43	36.6				
142	656	652	5.827	5.770	34.573	27.245	36.253	44.863	110	194.	27.9	2.52	37.2				
143	809	804	5.052	4.985	34.556	27.325	36.373	45.019									
144	957	951	4.627	4.550	34.624	27.428	36.497	45.162	144	168.	32.1	2.39	34.3				
145	1108	1100	4.437	4.348	34.746	27.547	36.624	45.297	166	148.	29.8	2.16	30.8				
146	1334	1324	4.247	4.139	34.882	27.678	36.763	45.445	199	116.	25.1	1.82	26.1				
147	1550	1537	4.074	3.948	34.928	27.734	36.829	45.519	215	101.	23.4	1.66	23.8				
148	1580	1567	4.019	3.891	34.934	27.745	36.843	45.535	218	99.	23.3	1.64	23.6				

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Seawater Data for AJAX (LONG LINES) Printed on 29-DEC-86

Leg 1 Station 2 Latitude 4-21.6 N Longitude 3-55.7 W Date 10/ 8/83 Bottom Depth 2815 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20°C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
125	3	2	25.927	25.926	34.389	22.597	30.890	38.828	214	-10.	1.2	0.06	0.0	264.	1924.	2260	1924.
126	25	25	23.185	23.180	35.127	23.979	32.336	40.334	193	20.	2.1	0.23	2.2	317.	1996	2307	
127	52	52	16.971	16.962	35.783	26.125	34.663	42.831	144	93.	5.4	0.94	13.1	530.	2128	2349	
128	77	76	15.924	15.912	35.648	26.267	34.843	43.046	110	132.	7.4	1.19	18.2	654	2156	2338	
129	102	101	15.488	15.472	35.608	26.336	34.927	43.146	103	141.	7.5	1.26	19.4	689.	2155.	2327	
130	151	150	14.631	14.608	35.524	26.463	35.086	43.334	95	154.	8.7	1.35	21.2	741	2166	2326	
131	201	200	13.867	13.838	35.399	26.530	35.182	43.459	77	176.	10.2	1.52	24.6	866.	2190	2325.	
132	251	250	12.414	12.380	35.222	26.689	35.399	43.730	59	202.	12.5	1.76	29.1	1052.	2207	2311	
133	301	300	10.255	10.219	34.990	26.907	35.708	44.124	54	220.	16.0	1.99	33.4	1272	2223	2299	
134	376	374	8.866	8.825	34.832	27.015	35.879	44.352	65	217.	18.1	2.11	35.2	1313	2227	2299	
135	502	499	7.130	7.082	34.660	27.140	36.085	44.635	94	200.	22.7	2.22	35.9				
136	628	624	6.022	5.966	34.578	27.224	36.223	44.824	109	193.	26.6	2.31	36.7				
137	751	747	5.253	5.190	34.552	27.298	36.336	44.972	123	185.	30.4	2.33	36.4	1272	2217	2292	2223
138	900	894	4.731	4.658	34.595	27.393	36.457	45.118	138	174.	31.9	2.24	34.7				
139	1101	1094	4.471	4.383	34.725	27.527	36.602	45.275	162	151.	29.4	2.01	31.2				
140	1303	1292	4.289	4.184	34.871	27.664	36.748	45.427	195	120.	25.0	1.71	26.4				
141	1554	1541	4.010	3.885	34.944	27.754	36.851	45.544	222	95.	22.7	1.50	23.0				
142	1757	1741	3.727	3.587	34.959	27.796	36.909	45.616	237	82.	22.7	1.39	21.4				
143	1908	1890	3.555	3.403	34.964	27.818	36.940	45.656	240	81.	25.5	1.38	21.1				
144	2058	2038	3.424	3.260	34.956	27.826	36.956	45.679	243	79.	25.5	1.38	21.1				
145	2209	2187	3.214	3.039	34.949	27.841	36.983	45.717	244	79	29.1	1.38	21.2				
146	2359	2335	3.086	2.898	34.940	27.847	36.996	45.738	244	81.	31.3	1.39	21.3				
147	2562	2534	2.898	2.694	34.932	27.859	37.019	45.771	244	82.	34.3	1.41	21.6				
148	2794	2762	2.742	2.518	34.921	27.865	37.035	45.796	240	88.	38.5	1.43	21.8	780.	2186	2337	

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Seawater Data for AJAX (LONG LINES) Printed on 29-DEC-86

Leg 1 Station 3 Latitude 3-39.0 N Longitude 3-47.7 W Date 10/ 8/83 Bottom Depth 3986 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20°C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - - -		uM/KG -	- - - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	2	1	26.120	26.120	34.763	22.819	31.103	39.033	207	-4.	1.3	0.02	0.0				
126	32	32	18.295	18.289	35.795	25.810	34.304	42.431	96	135.	4.8	1.08	15.7				
127	58	58	16.320	16.311	35.679	26.199	34.760	42.950	103	137.	6.3	1.21	18.4				
128	83	83	15.786	15.773	35.639	26.292	34.872	43.080	140	103.	6.3	1.11	16.4				
129	107	107	15.375	15.358	35.595	26.352	34.947	43.169	117	128.	7.5	1.21	18.2				
130	131	131	15.097	15.077	35.561	26.388	34.994	43.226	130	116.	7.4	1.16	17.1				
131	157	156	14.831	14.807	35.522	26.418	35.034	43.275	119	129.	7.7	1.25	18.6				
132	206	205	13.807	13.777	35.374	26.524	35.179	43.458	73	180.	10.5	1.59	25.3				
133	257	255	11.903	11.870	35.161	26.740	35.472	43.822	55	209.	14.1	1.86	30.4				
134	307	305	10.120	10.084	34.966	26.911	35.719	44.140	56	218.	16.8	2.03	33.6				
135	382	380	9.024	8.982	34.850	27.004	35.860	44.328	62	219.	18.3	2.13	35.0				
136	457	454	8.026	7.979	34.747	27.079	35.981	44.492	75	213.	20.7	2.21	35.8				
137	532	529	7.031	6.980	34.660	27.154	36.104	44.658									
138	608	604	6.227	6.172	34.591	27.208	36.197	44.788	102	199.	26.1	2.34	36.9				
139	708	704	5.492	5.432	34.552	27.269	36.295	44.920	116	190.	30.1	2.37	36.7				
140	809	803	4.971	4.905	34.560	27.338	36.389	45.039	131	179.	31.7	2.35	35.7				
141	908	902	4.671	4.598	34.609	27.411	36.477	45.141	142	170.	32.8	2.28	34.3				
142	1009	1002	4.519	4.438	34.672	27.479	36.552	45.222	153	160.	31.8	2.17	32.6				
143	1157	1149	4.420	4.327	34.783	27.579	36.656	45.330	173	141.	28.9	1.95	29.5				
144	1355	1345	4.226	4.117	34.900	27.695	36.781	45.463	203	112.	24.8	1.66	25.1				
145	1556	1543	3.969	3.844	34.946	27.760	36.859	45.554	224	93.	23.9	1.50	22.7				
146	1751	1736	3.735	3.595	34.960	27.796	36.908	45.615	236	83.	23.8	1.43	21.5				
147	1899	1881	3.578	3.426	34.960	27.813	36.934	45.649	241	79.	25.4	1.39	21.2				
148	2047	2027	3.396	3.233	34.955	27.827	36.959	45.683	242	80.	27.9	1.39	21.1				

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Seawater Data for AJAX (LONG LINES) Printed on 29-DEC-86

Leg 1 Station 4 Latitude 2-59.6 N Longitude 3-46.2 W Date 10/ 8/83 Bottom Depth 4662 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20°C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
212	1	1	26.508	26.508	35.153	22.991	31.261	39.178	210	-9.	1.7	0.07	0.0	237.	1923.	2294.	
125	3	2	26.546	26.545	35.170	22.992	31.261	39.177	206	-5.							
213	28	28	26.523	26.517	35.182	23.010	31.279	39.196	210	-9.	1.7	0.00	0.0	238.	1926.	2297.	
214	49	49	18.498	18.489	35.838	25.793	34.280	42.401	151	79.	4.5	0.80	10.4	485.	2106.	2343.	
215	73	73	16.421	16.409	35.689	26.184	34.741	42.928	144	96.	5.9	0.99	13.9	551.	2125.	2337.	
216	97	97	15.444	15.429	35.594	26.335	34.928	43.148	103	142.	8.3	1.30	19.4	690.	2158.	2330.	
217	122	122	15.002	14.983	35.538	26.391	35.000	43.236	97	150.	8.9	1.37	20.7	738.	2162.	2322.	
218	147	147	14.607	14.585	35.493	26.444	35.068	43.317	98	151.	9.3	1.42	21.4	736.			
219	197	196	14.022	13.993	35.415	26.510	35.157	43.428	96	156.	9.9	1.46	22.3	770.	2167.	2319	
220	247	246	13.403	13.368	35.335	26.578	35.250	43.543	84	171.	10.9	1.56	24.6	864.	2181.	2315	
221	296	295	11.185	11.148	35.089	26.818	35.580	43.958	57	211.	15.2	1.93	31.5	1151.	2210.	2300	
222	345	344	9.833	9.793	34.937	26.938	35.759	44.192	58	218.	17.4	2.09	34.0	1260.			
223	437	434	8.556	8.509	34.800	27.039	35.917	44.405	69	216.	19.9	2.21	35.6	1323.	2220.	2290	
224	579	575	6.538	6.485	34.615	27.186	36.159	44.736	101	197.	26.3	2.36	36.5	1311.			
126	719	715	5.522	5.461	34.548	27.263	36.287	44.911	124	182.	29.8	2.36	36.2	1252.			
127	817	812	5.039	4.972	34.561	27.331	36.379	45.026	127	182.	32.5	2.39	36.2	1277.	2218.	2293	
128	940	934	4.541	4.466	34.599	27.417	36.491	45.161	149	164.	33.5	2.29	34.2	1169.			
129	1089	1081	4.444	4.357	34.703	27.512	36.589	45.263	161	153.	31.3	2.13	31.9				
130	1288	1278	4.364	4.259	34.841	27.632	36.712	45.388	185	129.	26.2	1.87	27.8				
131	1485	1473	4.195	4.074	34.943	27.733	36.821	45.505	220	95.	20.9	1.54	23.2				
132	1611	1597	4.032	3.901	34.955	27.761	36.857	45.549	225	92.	22.0	1.50	22.7				
133	1743	1728	3.835	3.694	34.964	27.789	36.896	45.598	236	82.	22.3	1.44	21.6				
134	1897	1880	3.677	3.524	34.966	27.808	36.924	45.634	241	79.	23.1	1.40	21.0				
135	2096	2075	3.381	3.214	34.958	27.832	36.964	45.689	241	81.	27.6	1.42	21.1				
136	2242	2220	3.243	3.064	34.955	27.843	36.984	45.716	243	80.	29.3	1.43	21.1				
137	2374	2349	3.069	2.880	34.946	27.853	37.003	45.745									
138	2562	2534	2.927	2.722	34.937	27.860	37.019	45.769	242	84.	35.8	1.46	21.6				
139	2846	2814	2.738	2.509	34.926	27.870	37.041	45.802	241	87.	38.9	1.48	22.0				
140	3112	3074	2.619	2.365	34.921	27.879	37.057	45.825	242	87.	43.2	1.49	22.1				
141	3301	3260	2.551	2.279	34.913	27.879	37.062	45.835	241	89.	43.6	1.50	22.2				
142	3493	3448	2.505	2.233	34.910	27.882	37.069	45.846	240	90.	46.0	1.50	22.4				
143	3699	3650	2.467	2.154	34.905	27.883	37.073	45.853	241	90.	46.5	1.50	22.4				
144	3908	3854	2.418	2.082	34.903	27.887	37.082	45.865	239	92.	48.9	1.52	22.6				
146	4117	4058	2.361	2.003	34.892	27.885	37.084	45.871	239	93.	51.3	1.55	22.9				
145	4118	4059	2.361	2.003	34.895	27.887	37.086	45.873	239	93.	51.3	1.53	22.8				
147	4325	4261	2.295	1.915	34.888	27.889	37.092	45.884	240	93.	53.5	1.56	23.1				
148	4718	4644	2.231	1.806	34.880	27.891	37.101	45.899	237	97.	58.9	1.59	23.7	803.	2206.	2355.	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 5 Latitude 2-15.5 N Longitude 3-41.9 W Date 10/ 9/83 Bottom Depth 4920 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - - -		uM/KG	- - - - - -		uatm	uM/kg	uEq/kg	uM/kg
101	2	2	26.299	26.299	35.633	23.419	31.689	39.606	206	-5.	1.2	0.02	0.1				
102	35	35	26.205	26.197	35.672	23.481	31.752	39.671	207	-6.	1.3	0.03	0.1				
103	60	60	21.944	21.932	35.746	24.805	33.189	41.214	186	31.	2.4	0.37	3.3				
104	81	80	15.390	15.377	35.577	26.334	34.929	43.150	132	113.	6.4	1.13	16.6				
105	105	104	14.178	14.163	35.439	26.493	35.133	43.398	146	105.	7.3	1.15	16.7				
106	129	128	14.107	14.088	35.428	26.500	35.143	43.411	138	114.	7.5	1.21	17.6				
107	154	153	13.991	13.969	35.409	26.510	35.158	43.430	143	109.	7.5	1.18	17.1				
108	204	203	13.767	13.738	35.379	26.536	35.193	43.473	132	121	7 7	1.27	18.8				
109	254	253	13.530	13.494	35.347	26.562	35.228	43.517									
110	317	316	11.015	10.976	35.065	26.831	35.600	43.985	79	190.	13.1	1.83	29.4				
111	383	381	9.494	9.451	34.886	26.956	35.792	44.239	104	174.	17.6	2.00	31.6				
112	459	457	7 976	7.929	34.728	27.071	35.976	44.489	110	178.	19.3	2.05	32.4				
113	521	518	7.167	7.117	34.656	27.132	36.076	44.624	112	182.	21.2	2.20	34.2				
114	590	587	6.390	6.336	34.589	27.185	36.166	44.750	111	189.	24.5	2.34	35.9				
115	676	672	5.647	5.589	34.537	27.238	36.257	44.875	130	175.	27.1	2.34	35.5				
116	757	752	5.198	5.135	34.538	27.293	36.334	44.974	133	175.	29.6	2.38	35.8				
117	851	845	4.709	4.641	34.546	27.356	36.421	45.084	148	164.	31.3	2.33	34.6				
118	918	912	4.613	4.540	34.591	27.403	36.473	45.140	143	170.	32.2	2.34	34.6				
119	1050	1043	4.443	4.369	34.687	27.499	36.577	45.250	160	154.	29.8	2.16	32.0				
120	1240	1230	4.467	4.366	34.807	27.594	36.669	45.340	180	133.	27.0	1.93	28.6				
121	1433	1422	4.205	4.089	34.928	27.720	36.807	45.490	215	100.	22.2	1.60	23.7				
122	1621	1607	3.984	3.853	34.958	27.768	36.867	45.561	233	84.	20.7	1.47	21.8				
123	1773	1757	3.763	3.621	34.964	27.797	36.907	45.613	240	79.	21.8	1.42	21.1				
124	2039	2020	3.417	3.255	34.957	27.827	36.957	45.681	247	75.	24.4	1.40	20.7				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 6 Latitude 1-30.1 N Longitude 3-37.9 W Date 10/ 9/83 Bottom Depth 5091 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - - -		uM/KG -	- - - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	1	1	25.088	25.098	35.705	23.849	32.148	40.093	213	-8.							
212	3	2	25.120	25.119	35.705	23.840	32.138	40.082	210	-5.	0.7	0.09	0.0	276.			1989.
214	27	26	24.994	24.988	35.704	23.879	32.181	40.128	212	-7.	0.8	0.09	0.0	276.			
215	55	55	24.800	24.788	35.722	23.953	32.260	40.212	213	-7.	0.8	0.09	0.0				
216	73	73	15.738	15.727	35.617	26.286	34.868	43.078	120	123.	6.1	1.19	17.5				
217	95	95	14.527	14.513	35.488	26.456	35.082	43.334	144	105.	6.8	1.12	16.2				
218	144	143	14.282	14.261	35.450	26.480	35.117	43.378	146	105.	6.9	1.16	16.3				
219	185	185	13.986	13.959	35.411	26.514	35.162	43.434	133	119.	7.4	1.26	18.2				
220	240	239	13.371	13.337	35.325	26.577	35.250	43.544	118	138.	8.4	1.39	20.7				
221	292	291	13.276	13.235	35.329	26.601	35.277	43.576	115	141.	8.4	1.39	20.8				
222	345	344	9.834	9.794	34.921	26.926	35.746	44.180	94	182.	14.8	1.90	30.0				
223	416	414	8.488	8.444	34.770	27.026	35.907	44.398	107	178.	17.1	2.01	31.6				
126	505	503	7.882	7.831	34.706	27.068	35.979	44.495	125	164.	18.3	2.01	31.1				
224	571	567	6.630	6.577	34.602	27.163	36.133	44.706	126	172.	22.3	2.19	33.6				
127	655	651	6.003	5.945	34.566	27.217	36.217	44.819	116	186.	25.8	2.38	36.1				
128	806	801	4.665	4.601	34.526	27.345	36.412	45.077	149	163.	31.3	2.33	34.6				
129	956	950	4.500	4.424	34.586	27.412	36.487	45.160	155	159.	32.2	2.29	33.7				
130	1108	1100	4.443	4.354	34.741	27.542	36.619	45.292	174	140.	29.5	2.05	30.5				
131	1308	1298	4.380	4.273	34.864	27.649	36.728	45.403	185	129.	26.1	1.89	27.8				
132	1560	1547	4.038	3.912	34.964	27.767	36.863	45.554	236	81.	19.4	1.46	21.4				
133	1761	1745	3.745	3.604	34.967	27.801	36.912	45.618	246	73.	20.7	1.39	20.4				
134	1912	1894	3.515	3.363	34.963	27.821	36.946	45.664	250	71.	22.3	1.38	20.3				
135	2063	2043	3.404	3.240	34.958	27.829	36.960	45.684	252	70.	23.3	1.37	20.3				
136	2215	2193	3.255	3.078	34.950	27.838	36.978	45.710	247	76.	27.0	1.42	20.7				
137	2364	2340	3.071	2.883	34.942	27.850	37.000	45.742	250	75.	29.6	1.42	20.7				
138	2567	2539	2.968	2.762	34.933	27.854	37.010	45.759	248	78.	32.2	1.44	21.1				
139	2822	2789	2.782	2.554	34.921	27.862	37.030	45.789	246	82.	36.5	1.46	21.6				
140	3129	3091	2.620	2.364	34.911	27.870	37.049	45.818	244	85.	40.2	1.49	22.0				
141	3433	3389	2.502	2.217	34.903	27.876	37.063	45.840	245	85.	42.9	1.49	22.1				
142	3737	3686	2.425	2.109	34.897	27.880	37.073	45.855	246	85.	45.3	1.50	22.2				
143	4032	3975	2.337	1.990	34.887	27.882	37.082	45.870	245	87.	48.6	1.52	22.5				
144	4341	4277	2.276	1.895	34.879	27.883	37.088	45.881	243	90.	53.1	1.55	22.9				
145	4648	4575	2.221	1.805	34.870	27.883	37.093	45.891	242	92.	56.8	1.58	23.3				
146	4854	4776	2.184	1.744	34.864	27.883	37.096	45.898	242	92.	57.9	1.58	23.5				
147	5016	4934	2.180	1.719	34.862	27.883	37.098	45.901	244	91.	58.6	1.58	23.4				
148	5170	5083	2.173	1.693	34.860	27.884	37.100	45.904	245	90.	58.3	1.59	23.5				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 7 Latitude 0-43.9 N Longitude 3-34.1 W Date 10/ 9/83 Bottom Depth 5116 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
201	2	2	25.059	25.059	35.692	23.848	32.148	40.094	212	-7.	1.3	0.11	0.0	277.			
202	27	27	24.998	24.992	35.689	23.866	32.168	40.115	213	-8.	1.2	0.11	0.0	276.			
203	55	55	23.966	23.954	35.723	24.204	32.532	40.505	204	5.	2.0	0.21	0.9				
204	77	76	17.256	17.243	35.685	25.983	34.512	42.673	120	116.	6.0	1.09	15.8				
173	89	89	16.158	16.144	35.657	26.221	34.788	42.984			7.1	1.18	16.8				
205	100	100	15.218	15.203	35.572	26.369	34.970	43.198	129	117.	7.4	1.18	17.2				
206	125	125	14.611	14.592	35.502	26.449	35.073	43.322	143	106.	7.4	1.15	16.4				
174	138	138	14.523	14.503	35.485	26.455	35.083	43.335			7.5	1.18	16.5				
207	150	149	14.400	14.378	35.471	26.472	35.103	43.360	141	109.	7.7	1.18	16.8				
208	200	199	13.785	13.756	35.380	26.533	35.189	43.468	132	121.	8.3	1.29	18.8				
209	250	249	12.840	12.806	35.259	26.633	35.327	43.642	92	167.	10.8	1.59	24.7				
175	306	305	10.528	10.491	35.005	26.871	35.661	44.066			14.9	1.97	31.7				
210	318	317	9.764	9.727	34.917	26.934	35.757	44.193	92	185.	14.8	1.93	30.4				
211	392	390	8.132	8.092	34.731	27.049	35.947	44.453	114	173.	18.5	2.04	31.7				
376	440	438	7.639	7.595	34.677	27.080	36.001	44.529			19.5	2.07	32.2				
212	467	465	7.478	7.432	34.666	27.095	36.024	44.558	119	173.	20.0	2.11	32.6				
213	543	540	6.747	6.696	34.604	27.149	36.113	44.680	130	167.	22.1	2.17	33.1				
214	618	614	6.097	6.042	34.558	27.198	36.194	44.792	132	170.	24.6	2.27	34.7				
215	707	702	5.164	5.106	34.522	27.284	36.327	44.968	140	169.	28.8	2.35	35.3				
216	797	792	4.715	4.651	34.529	27.342	36.406	45.069	150	162.	31.0	2.32	34.7				
377	886	880	4.551	4.481	34.536	27.366	36.439	45.110			31.5	2.30	34.6				
217	896	891	4.498	4.427	34.564	27.394	36.470	45.142	154	160.	31.1	2.30	34.3				
218	994	987	4.471	4.392	34.623	27.445	36.521	45.195	157	157.	31.1	2.24	33.1				
219	1145	1137	4.459	4.367	34.775	27.568	36.644	45.316	175	138.	28.3	1.98	29.4				
220	1347	1337	4.385	4.275	34.899	27.677	36.755	45.430	205	109.	23.3	1.68	24.9				
378	1499	1487	4.212	4.090	34.945	27.733	36.820	45.503			20.8	1.53	22.7				
221	1549	1536	4.127	4.001	34.959	27.754	36.845	45.532	232	84.	20.2	1.48	21.9				
222	1750	1735	3.796	3.655	34.970	27.798	36.907	45.610	247	72.	19.9	1.38	20.3				
223	1901	1884	3.622	3.470	34.967	27.814	36.933	45.645	250	70.	21.8	1.36	20.2				
224	2094	2074	3.384	3.217	34.959	27.832	36.964	45.689	250	72.	25.3	1.41	20.6				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 8 Latitude 0- 1.0 S Longitude 3-27.7 W Date 10/10/83 Bottom Depth 5129 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	1	1	25.158	25.158	35.741	23.855	32.152	40.095	211	-6.	1.4	0.11	0.0				
201	2	2	25.197	25.197	35.747	23.848	32.143	40.085	214	-9.	0.1	0.11	0.0				
202	2	2	25.211	25.211	35.749	23.845	32.140	40.082	211	-6.	0.1	0.11	0.0	277.	2009.	2363.	1995
203	25	25	25.187	25.182	35.745	23.851	32.147	40.089	211	-6.	0.1	0.09	0.0	277.			
204	41	41	25.090	25.081	35.737	23.875	32.174	40.119	210	-5.	0.1	0.12	0.2	280.	2012.	2364	
205	50	49	20.514	20.505	35.778	25.222	33.647	41.710	161	61.	2.3	0.67	8.5				
206	58	58	19.168	19.158	35.891	25.663	34.128	42.229	156	71.	2.7	0.77	9.9	456.	2118.	2372	
207	67	67	18.217	18.205	35.954	25.953	34.447	42.575	168	63.	2.7	0.76	9.2	447.			
208	78	78	17.365	17.352	35.851	26.084	34.607	42.763	167	68.	3.3	0.81	10.1	467.	2128.	2378.	
209	93	93	16.308	16.293	35.725	26.239	34.799	42.990	164	76.	4.0	0.89	11.6	496.			
210	118	117	15.286	15.268	35.582	26.362	34.961	43.186	154	91.	5.3	1.05	14.2	558.	2143.	2355	
211	148	147	14.728	14.706	35.513	26.433	35.052	43.297	145	103.	5.7	1.14	16.0	595.			
212	172	172	14.274	14.249	35.450	26.483	35.120	43.381	142	109.	5.9	1.20	16.9	622.	2155.	2346	
213	196	195	14.097	14.068	35.423	26.500	35.144	43.412	142	110.	6.3	1.22	17.2				
214	247	246	12.985	12.951	35.276	26.617	35.305	43.615	115	143.	8.2	1.48	21.9	760.	2183.	2339	
215	295	293	11.051	11.014	35.072	26.829	35.597	43.980	70	199.	12.4	1.91	30.1	1081.			
216	343	341	9.321	9.283	34.869	26.970	35.813	44.268	84	196.	15.1	2.04	32.3	1153.	2225.	2316	
217	418	416	7.777	7.735	34.696	27.075	35.989	44.510	107	183.							
253	493	491	7.357	7.309	34.663	27.110	36.045	44.585	118	175.	19.2	2.16	32.8	1135.	2216.	2308	
219	593	590	6.208	6.155	34.551	27.178	36.169	44.761	138	163.	23.3	2.22	33.4	1124.			
220	691	687	5.568	5.509	34.530	27.242	36.265	44.887	130	176.	26.3	2.38	35.6	1213.	2227.	2310	
221	790	785	4.874	4.810	34.508	27.307	36.364	45.020	147	164.	29.2	2.34	34.3				
222	889	884	4.524	4.454	34.553	27.382	36.457	45.128	153	160.	32.7	2.34	34.2	1154.	2228.	2319	
223	989	982	4.429	4.351	34.630	27.455	36.533	45.208	159	155.	32.2	2.24	32.9				
126	1152	1144	4.435	4.342	34.760	27.559	36.636	45.309	173	141.	28.4	1.96	29.8				
224	1337	1327	4.390	4.281	34.910	27.685	36.763	45.437	210	104.	21.8	1.67	24.4				
127	1552	1539	4.147	4.020	34.958	27.751	36.841	45.527	231	85.	19.9	1.46	21.9				
128	1727	1712	3.858	3.719	34.971	27.792	36.898	45.598	246	72.	19.7	1.36	20.3				
129	1877	1859	3.686	3.535	34.968	27.808	36.924	45.633	248	71.	21.2	1.35	20.2				
130	2026	2007	3.548	3.385	34.966	27.822	36.945	45.662	249	72.	21.5	1.35	20.2				
131	2175	2154	3.297	3.123	34.959	27.841	36.978	45.708	252	71.	25.2	1.36	20.3				
132	2349	2325	3.125	2.938	34.942	27.845	36.992	45.731	247	77.	28.7	1.39	20.7				
133	2525	2498	2.941	2.740	34.933	27.855	37.014	45.763	245	81.	34.4	1.45	21.5				
134	2701	2671	2.758	2.543	34.919	27.862	37.030	45.790	244	84.	38.6	1.47	21.9				
135	2877	2844	2.671	2.440	34.914	27.866	37.041	45.806	245	83.	40.2	1.48	21.9				
136	3053	3017	2.581	2.334	34.907	27.870	37.050	45.821	246	83.	42.9	1.49	22.0				
137	3231	3191	2.552	2.287	34.905	27.872	37.055	45.828	244	86.	43.5	1.49	22.2				
138	3408	3365	2.485	2.203	34.903	27.878	37.065	45.842	247	83.	44.3	1.50	22.2				
139	3586	3539	2.413	2.114	34.896	27.879	37.072	45.854	246	85.	46.0	1.51	22.3				
140	3762	3711	2.384	2.066	34.894	27.881	37.077	45.861	247	85.	47.0	1.51	22.3				
141	3941	3886	2.351	2.014	34.888	27.881	37.079	45.866	247	85.	47.6	1.51	22.4				
142	4120	4061	2.303	1.947	34.884	27.883	37.085	45.875	247	86.	49.3	1.53	22.6				
143	4295	4232	2.264	1.888	34.880	27.884	37.090	45.883	247	86.	51.5	1.54	22.8				
144	4474	4406	2.248	1.852	34.876	27.884	37.091	45.887	247	87.	53.0	1.55	22.9				
145	4654	4581	2.209	1.792	34.871	27.885	37.095	45.894	246	88.	54.3	1.57	23.1				
146	4831	4754	2.188	1.750	34.867	27.885	37.098	45.899	247	87.	56.3	1.58	23.2				
147	5010	4928	2.173	1.713	34.863	27.884	37.099	45.903	245	90.	58.1	1.59	23.5				
148	5187	5100	2.142	1.661	34.858	27.884	37.102	45.908	245	90.	59.2	1.61	23.7	803.	2222.	2373.	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 9 Latitude 0-44.5 S Longitude 3-25.5 W Date 10/10/83 Bottom Depth 5137 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
											uM/KG						
101	2	1	25.385	25.385	35.801	23.831	32.121	40.058	211	-7.	1.6	0.09	0.1	270			
102	28	28	25.264	25.258	35.774	23.849	32.143	40.083	211	-7.	1.7	0.09	0.1	272.			
103	47	47	21.265	21.256	35.912	25.120	33.521	41.562	176	43.	3.3	0.56	6.3	390.			
104	67	66	19.061	19.049	35.870	25.675	34.144	42.247	134	94.	4.9	0.95	13.0	511.			
105	90	90	15.797	15.783	35.616	26.272	34.852	43.060	132	111.	6.9	1.14	16.3	602.			
106	114	114	14.491	14.474	35.479	26.457	35.085	43.339	141	109.	7.3	1.16	16.7	612.			
107	149	148	14.081	14.059	35.418	26.499	35.143	43.411	141	111.	7.4	1.19	17.1				
108	198	198	13.666	13.638	35.355	26.538	35.199	43.483	138	116.	8.6	1.26	18.3				
109	249	248	12.976	12.942	35.273	26.617	35.305	43.615	110	148.	10.1	1.46	22.3				
110	299	297	10.791	10.754	35.004	26.823	35.603	43.997	62	208.	15.7	2.00	31.9				
111	374	372	8.926	8.885	34.813	26.990	35.852	44.323	83	199.	18.2	2.11	33.3				
112	448	446	7.476	7.432	34.658	27.089	36.018	44.552	122	170.	20.4	2.09	32.2				
113	523	520	6.810	6.761	34.596	27.134	36.095	44.660	130	167.	22.5	2.18	32.7				
114	598	594	6.138	6.085	34.543	27.181	36.175	44.771	140	161.	25.4	2.22	33.1				
115	673	669	5.433	5.376	34.499	27.234	36.263	44.892	137	170.	29.1	2.36	35.1				
116	748	744	4.855	4.795	34.487	27.292	36.350	45.006	150	161.	32.2	2.36	34.7				
117	874	869	4.563	4.494	34.540	27.368	36.440	45.110	153	160.	34.1	2.34	34.2				
153	1000	993	4.405	4.326	34.625	27.453	36.533	45.210	160	154.	34.1	2.25	32.6				
119	1151	1142	4.388	4.296	34.792	27.589	36.668	45.344	181	133.	28.9	1.96	28.8				
120	1353	1342	4.392	4.281	34.911	27.686	36.763	45.438	210	104.	22.6	1.66	24.4				
121	1554	1541	4.151	4.024	34.956	27.749	36.839	45.525	231	85.	20.7	1.50	21.9				
122	1752	1736	3.792	3.651	34.969	27.798	36.907	45.610	248	71.	19.5	1.39	20.3				
123	1929	1911	3.588	3.433	34.965	27.816	36.937	45.651	250	70.	22.5	1.37	20.3				
124	2084	2064	3.398	3.232	34.957	27.829	36.961	45.685									

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 10 Latitude 1-30.3 S Longitude 3-20.0 W Date 10/11/83 Bottom Depth 5123 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
212	1	1	24.257	24.257	35.773	24.152	32.472	40.436	215	-7.	1.5	0.11	0.0	282.	1999.	2346.	
125	2	2	24.278	24.278	35.772	24.145	32.464	40.428			1.4	0.11	0.0				
213	25	25	24.249	24.244	35.775	24.157	32.478	40.442	215	-7.	1.4	0.11	0.2	284.	2001.	2347.	
214	57	57	22.586	22.574	35.936	24.768	33.131	41.137	189	25.	2.4	0.41	3.9				
215	87	87	15.146	15.133	35.547	26.365	34.969	43.199	124	122.	6.9	1.21	17.6				
216	121	121	14.181	14.163	35.432	26.487	35.128	43.392	155	96.	7.3	1.21	17.2				
217	146	145	13.933	13.912	35.396	26.513	35.163	43.436	143	109.	7.4	1.21	17.0				
253	171	170	13.884	13.859	35.388	26.517	35.170	43.445	144	109.	7.3	1.21	17.0				
219	196	195	13.753	13.725	35.368	26.530	35.188	43.468	133	121.	7.9	1.28	18.5				
220	231	230	13.508	13.475	35.336	26.557	35.224	43.514	134	121.	8.0	1.31	18.7				
221	266	265	13.179	13.142	35.293	26.592	35.272	43.575	121	136.	8.9	1.43	20.7				
222	331	329	10.431	10.391	34.990	26.877	35.671	44.080	73	200.	14.3	1.96	31.0				
223	405	403	9.125	9.080	34.843	26.983	35.835	44.298	84	197.	16.3	2.10	32.5				
126	503	500	7.820	7.769	34.695	27.069	35.982	44.502			18.8	2.12	32.4				
224	595	591	6.762	6.706	34.588	27.135	36.099	44.666	141	156.	20.9	2.14	31.6				
127	704	700	5.457	5.397	34.503	27.234	36.263	44.891			27.3	2.39	35.1				
128	803	798	4.940	4.875	34.494	27.288	36.343	44.995			30.3	2.40	35.0				
129	954	948	4.379	4.304	34.579	27.419	36.501	45.179			33.5	2.36	33.9				
130	1104	1096	4.362	4.274	34.731	27.543	36.624	45.301			30.0	2.12	30.4				
131	1304	1294	4.431	4.324	34.856	27.637	36.714	45.387									
132	1506	1493	4.175	4.052	34.944	27.736	36.825	45.510			20.4	1.56	22.6				
133	1658	1643	3.831	3.698	34.963	27.788	36.895	45.596			20.4	1.46	20.9				
134	1807	1791	3.716	3.571	34.964	27.802	36.915	45.623			20.4	1.41	20.4				
135	1955	1937	3.549	3.392	34.960	27.816	36.939	45.655			22.5	1.40	20.5				
136	2108	2087	3.297	3.130	34.950	27.833	36.970	45.700			26.1	1.43	20.5				
137	2309	2286	3.074	2.891	34.937	27.845	36.995	45.737			30.5	1.46	21.1				
138	2510	2484	2.936	2.736	34.929	27.853	37.011	45.760			33.4	1.47	21.3				
139	2762	2731	2.721	2.501	34.913	27.860	37.031	45.793			38.8	1.53	22.1				
140	3010	2975	2.567	2.325	34.906	27.870	37.051	45.821			42.2	1.54	22.2				
141	3264	3224	2.486	2.219	34.899	27.873	37.060	45.836			44.4	1.54	22.4				
142	3516	3471	2.419	2.127	34.899	27.880	37.072	45.853			45.4	1.54	22.2				
143	3769	3718	2.383	2.064	34.895	27.882	37.078	45.862			46.2	1.54	22.4				
144	4020	3963	2.332	1.986	34.883	27.879	37.079	45.867			47.6	1.56	22.5				
145	4269	4207	2.278	1.905	34.878	27.882	37.086	45.879			49.3	1.57	22.6				
146	4563	4493	2.218	1.812	34.870	27.882	37.092	45.890			52.4	1.60	23.0				
147	4861	4783	2.178	1.737	34.863	27.883	37.096	45.898			55.6	1.62	23.4				
148	5198	5111	2.167	1.684	34.858	27.883	37.099	45.904			56.8	1.62	23.5				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 11 Latitude 2-15.0 S Longitude 3-16.8 W Date 10/11/83 Bottom Depth 5027 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
101	2	2	23.707	23.707	35.854	24.377	32.710	40.688	217	-7.	1.5	0.22	1.1	306.			
102	20	20	23.660	23.656	35.853	24.391	32.726	40.704	215	-5.	1.5	0.21	1.1	306.			
103	48	48	23.606	23.596	35.859	24.413	32.750	40.729	214	-4.	1.5	0.24	1.3				
104	69	69	21.865	21.851	35.839	24.899	33.284	41.310	189	28.	2.7	0.51	4.9				
105	90	90	15.361	15.347	35.589	26.350	34.946	43.168	116	129.	6.6	1.22	18.0				
106	115	114	14.581	14.564	35.496	26.451	35.076	43.326	117	132.	7.3	1.29	19.1				
107	150	149	13.910	13.888	35.405	26.524	35.175	43.450	140	113.	7.4	1.22	17.6				
108	199	199	13.603	13.575	35.353	26.550	35.213	43.499	139	115.	7.9	1.27	18.4				
109	249	248	13.129	13.094	35.296	26.604	35.286	43.590	86	171.	9.0	1.46	22.5				
148	299	298	12.039	12.000	35.153	26.709	35.435	43.781	86	177.	11.0	1.71	26.8				
111	374	372	9.653	9.610	34.888	26.931	35.760	44.201	86	191.	15.1	2.00	31.7				
112	448	446	8.724	8.676	34.796	27.010	35.881	44.361	98	185.	16.5	2.03	32.2				
113	519	517	7.206	7.156	34.624	27.101	36.043	44.591	133	161.	19.6	2.08	31.6				
114	592	589	6.204	6.151	34.547	27.176	36.166	44.759	136	165.	23.3	2.23	33.7				
115	664	660	5.755	5.697	34.527	27.217	36.230	44.844	125	179.	26.0	2.38	35.7				
116	739	734	5.358	5.296	34.502	27.246	36.279	44.912	134	173.	27.7	2.38	35.6				
117	865	859	4.614	4.545	34.502	27.332	36.403	45.070	148	165.	32.3	2.39	35.2				
153	986	979	4.361	4.284	34.592	27.432	36.515	45.193	150	165.	33.3	2.34	34.2				
119	1136	1128	4.332	4.242	34.718	27.536	36.619	45.298	168	147.	29.9	2.11	31.0				
120	1335	1325	4.139	4.033	34.849	27.663	36.754	45.441	196	120.	26.1	1.83	26.8				
121	1535	1522	4.004	3.881	34.936	27.748	36.846	45.539	224	93.	21.8	1.57	23.0				
122	1730	1715	3.748	3.610	34.957	27.792	36.904	45.610	242	77.	21.0	1.44	21.2				
123	1906	1889	3.606	3.453	34.963	27.813	36.932	45.646	248	72.	21.1	1.39	20.6				
124	2032	2013	3.406	3.244	34.953	27.825	36.955	45.679	248	74.	24.1	1.41	20.7				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 12 Latitude 3- 0.2 S Longitude 3-12.8 W Date 10/11/83 Bottom Depth 4782 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
									- - -	- - -	uM/KG -	- - -	- - -				
125	3	2	23.447	23.446	35.869	24.464	32.805	40.789	225	-14.							
209	3	3	23.411	23.410	35.926	24.518	32.859	40.843						320.	2035.	2358.	
208	3	3	23.410	23.409	35.869	24.475	32.817	40.801	220	-9.	2.0	0.31	1.8				2032
211	26	26	23.313	23.308	35.867	24.504	32.848	40.835	220	-9.	1.7	0.30	1.8	318.	2039.	2365	
212	49	49	18.553	18.544	35.689	25.665	34.152	42.273	159	71.	4.2	0.87	10.5	480.	2111.	2351	
213	72	72	15.128	15.117	35.548	26.370	34.974	43.205	120	126.	6.6	1.25	18.1	653.			
214	96	96	14.578	14.564	35.491	26.447	35.072	43.322	107	142.	7.6	1.38	20.3	718.	2166.	2331	
215	116	115	14.207	14.190	35.439	26.487	35.126	43.390	95	156.	8.1	1.47	22.0	776.			
216	135	135	13.953	13.934	35.403	26.513	35.163	43.436	88	164.	8.5	1.52	23.2	817			
217	156	155	13.779	13.757	35.380	26.533	35.189	43.468	84	169.	8.7	1.56	23.8	843			
253	175	175	13.497	13.472	35.356	26.573	35.240	43.530	85	170.	9.0	1.58	23.9	850.	2184.	2321.	
219	220	219	12.756	12.726	35.248	26.641	35.338	43.655	84	175.	9.9	1.65	25.6	905.	2191.	2318	
220	265	264	11.917	11.882	35.140	26.721	35.453	43.803	104	160.	10.1	1.63	24.9	874.	2180.	2311.	
221	296	295	11.669	11.631	35.118	26.751	35.493	43.853	67	198.	11.9	1.89	29.0	1061.	2207.	2310.	
222	318	316	11.176	11.136	35.053	26.792	35.555	43.935	107	161.	11.2	1.71	25.8	904.			
223	391	389	9.347	9.303	34.862	26.961	35.804	44.258	44	235.	16.5	2.29	36.2	1427.	2241.	2302.	
126	496	493	6.717	6.671	34.590	27.141	36.106	44.675	123	174.	21.3	2.22	33.7				
224	611	608	5.700	5.648	34.512	27.211	36.227	44.843	137	168.	25.1	2.33	34.4	1183.			
128	741	736	4.976	4.916	34.489	27.280	36.332	44.983	142	168.	29.5	2.39	35.2				2208.
127	741	737	4.965	4.905	34.494	27.285	36.338	44.989						1216.	2216.	2298	
129	867	861	4.547	4.479	34.517	27.351	36.425	45.096	143	170.	32.9	2.43	35.5				
130	1020	1013	4.328	4.248	34.613	27.452	36.536	45.217	157	158.	32.9	2.29	33.2				
131	1198	1189	4.351	4.255	34.729	27.544	36.626	45.304	170	144.	29.8	2.10	30.5				
132	1400	1389	4.111	3.999	34.862	27.677	36.770	45.458	199	117.	25.6	1.78	26.2				
133	1603	1589	3.944	3.815	34.943	27.760	36.861	45.557	229	88.	21.4	1.53	22.4				
134	1807	1791	3.703	3.558	34.953	27.794	36.908	45.617	239	80.	22.2	1.47	21.4				
135	2010	1991	3.429	3.269	34.949	27.819	36.948	45.672	244	78.	25.0	1.45	21.1				
136	2259	2237	3.099	2.921	34.932	27.838	36.987	45.727	242	82.	31.5	1.48	21.6				
137	2506	2479	2.832	2.635	34.919	27.854	37.017	45.772	242	85.	36.5	1.50	22.0				
138	2753	2722	2.726	2.506	34.913	27.860	37.031	45.792	242	86.	38.8	1.50	22.2				
139	3005	2970	2.576	2.334	34.904	27.867	37.048	45.818	241	88.	42.4	1.53	22.5				
140	3258	3217	2.477	2.211	34.898	27.873	37.060	45.837	242	88.	44.4	1.54	22.6				
141	3510	3465	2.422	2.131	34.892	27.875	37.066	45.847	243	88.	45.3	1.53	22.6				
142	3764	3713	2.388	2.069	34.890	27.878	37.073	45.857	245	87.	45.7	1.53	22.5				
143	4016	3959	2.336	1.991	34.884	27.880	37.079	45.867	246	86.	47.8	1.55	22.6				
144	4272	4209	2.294	1.920	34.878	27.880	37.084	45.876	246	87.	49.5	1.56	22.8				
145	4526	4457	2.232	1.830	34.870	27.881	37.089	45.886	246	88.	52.2	1.57	22.9				
146	4769	4693	2.191	1.761	34.864	27.881	37.094	45.895	245	89.	54.9	1.59	23.3				
148	4868	4790	2.194	1.752	34.864	27.882	37.095	45.896	245	89.	54.8	1.59	23.3				2209.
147	4869	4791	2.195	1.752	34.864	27.882	37.095	45.896						789.	2198.	2349.	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 13 Latitude 4-10.8 S Longitude 3- 8.0 W Date 10/12/83 Bottom Depth 4787 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	2	2	22.885	22.885	35.834	24.601	32.957	40.956	218	-5.							
212	2	2	22.890	22.890	35.831	24.598	32.954	40.952	219	-6.	1.9	0.27	1.6				
213	36	36	22.896	22.889	35.831	24.598	32.954	40.952	218	-5.	1.9	0.27	1.6				
214	50	50	19.602	19.593	35.787	25.471	33.923	42.013	142	84.	4.0	0.93	11.1				
215	73	73	15.540	15.529	35.582	26.304	34.893	43.110	94	150.	6.8	1.39	21.0				
216	97	96	13.917	13.903	35.392	26.511	35.162	43.436	92	161.	8.4	1.49	23.0				
217	121	121	13.400	13.383	35.333	26.574	35.245	43.538	96	159.	9.0	1.50	23.3				
253	147	146	12.974	12.954	35.279	26.619	35.307	43.616	97	161.	9.3	1.53	23.7				
219	196	196	12.151	12.125	35.177	26.703	35.425	43.765	96	166.	10.5	1.61	25.3				
220	246	245	11.115	11.084	35.047	26.797	35.562	43.943	85	183.	12.1	1.78	28.3				
221	306	304	9.710	9.675	34.888	26.920	35.746	44.184	90	187.	14.4	1.93	30.7				
222	367	365	8.795	8.755	34.796	26.998	35.865	44.342	78	205.	16.9	2.11	34.1				
223	431	429	7.531	7.488	34.682	27.100	36.026	44.557	68	223.	20.8	2.36	37.8				
126	503	500	6.203	6.158	34.553	27.179	36.170	44.762									
224	596	592	5.666	5.615	34.508	27.212	36.229	44.847	137	168.	25.7	2.27	34.5				
127	702	698	5.132	5.074	34.487	27.260	36.304	44.947	146	163.	28.6	2.31	34.9				
128	852	847	4.575	4.508	34.512	27.344	36.417	45.086	144	169.	33.0	2.37	35.6				
129	1004	997	4.282	4.204	34.588	27.437	36.524	45.207	159	156.	33.6	2.25	33.5				
130	1205	1196	4.284	4.188	34.717	27.541	36.627	45.309									
131	1406	1394	4.226	4.112	34.897	27.693	36.779	45.462	208	107.	22.7	1.66	24.9				
132	1607	1593	3.951	3.822	34.941	27.758	36.859	45.555	228	89.	21.2	1.50	22.6				
133	1808	1791	3.740	3.595	34.955	27.792	36.904	45.611	240	79.	21.3	1.43	21.4				
134	2009	1990	3.476	3.316	34.949	27.815	36.942	45.662	242	79.	24.6	1.44	21.3				
135	2210	2188	3.120	2.946	34.933	27.837	36.984	45.723	242	82.	31.1	1.47	21.9				
136	2412	2386	2.972	2.781	34.925	27.845	37.001	45.749	241	85.	34.2	1.47	22.0				
137	2615	2586	2.796	2.589	34.918	27.857	37.023	45.781	242	85.	38.1	1.50	22.3				
138	2818	2786	2.655	2.430	34.909	27.863	37.038	45.804	241	88.	41.3	1.50	22.5				
139	3022	2986	2.571	2.327	34.904	27.868	37.049	45.819	241	88.	43.3	1.52	22.7				
140	3224	3185	2.511	2.248	34.901	27.872	37.057	45.832	241	89.	44.8	1.53	22.8				
141	3428	3384	2.445	2.162	34.897	27.876	37.066	45.845	241	90.	46.2	1.53	22.8				
142	3632	3584	2.415	2.110	34.894	27.878	37.071	45.853	242	89.	46.9	1.53	22.8				
143	3836	3783	2.388	2.061	34.891	27.880	37.075	45.859	243	89.	47.7	1.54	22.9				
144	4040	3983	2.317	1.969	34.884	27.881	37.082	45.871	244	89.	49.5	1.54	22.9				
145	4244	4181	2.265	1.895	34.876	27.881	37.086	45.879	246	87.	50.3	1.53	22.8				
146	4449	4381	2.223	1.831	34.871	27.882	37.090	45.887	246	88.	52.0	1.54	23.0				
147	4653	4581	2.199	1.783	34.869	27.884	37.095	45.894	245	89.	53.4	1.56	23.2				
148	4850	4772	2.213	1.772	34.866	27.882	37.094	45.894	244	90.	54.5	1.56	23.3				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 14 Latitude 5-20.4 S Longitude 3- 0.6 W Date 10/12/83 Bottom Depth 5039 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
201	2	2	22.339	22.339	35.742	24.688	33.060	41.074						327.	2053	2374	
125	2	2	22.384	22.384	35.735	24.669	33.041	41.054	221	-6.	1.9	0.33	0.9				
202	2	2	22.342	22.342	35.738	24.684	33.056	41.070	221	-6.	2.3	0.29	0 8				2040.
207	21	21	22.340	22.336	35.739	24.686	33.059	41.073	221	-6.	2.1	0.28	0 8	327.	2046.	2365	
208	38	37	22.206	22.198	35.737	24.724	33.100	41.118	203	13.	2.6	0.44	2 8	357.	2068.	2369	2068
209	51	50	18.112	18.103	35.691	25.777	34.278	42.412	128	104.	5.1	1.05	13.7	560.	2136.	2346	
210	69	69	15.672	15.661	35.582	26.274	34.858	43.071	97	147.	6.8	1.35	19 7				
211	88	88	14.508	14.495	35.470	26.445	35.073	43.326	83	166.	8.3	1.49	23.0	811.	2181.	2327.	2181.
212	108	108	14.076	14.060	35.419	26.499	35.143	43.412	87	165.	8.6	1.48	23.1	814.			
213	128	128	14.007	13.988	35.406	26.504	35.151	43.422	88	164.	8.9	1.50	23 3	821.	2171.	2313.	
214	149	148	13 758	13.737	35.375	26.533	35.190	43.470	89	164.	9.1	1.52	23.5				
215	173	172	12.808	12.784	35.252	26.632	35.327	43.642	106	153.	9.3	1.50	23.1	803.	2163	2307	2173
216	198	197	12.256	12.230	35.181	26.686	35.403	43.740	100	162.	10.2	1.61	24.5	862.			
217	247	246	11.663	11.631	35.113	26 747	35.489	43.849	103	162.	11.0	1.63	25.4	889.	2175.	2303.	
253	298	296	10.554	10.518	34.980	26.847	35.636	44.040	102	170.	12.1	1.71	26.6	944			
219	348	346	9.800	9.760	34.906	26.920	35.742	44.177	58	219.	15.5	2.07	33.8	1280.	2220	2295	
220	423	421	8.522	8.477	34.775	27.025	35.905	44.393	53	232.	18.7	2.29	37.3	1477			
221	498	495	7.377	7.328	34.667	27.111	36.044	44.583	67	226.	21.3	2.38	38.3	1483	2227	2282	2236
222	573	570	6.048	5.997	34.556	27.202	36.200	44.800	94	208.	25.5	2.42	38.3				
223	648	644	5.199	5.146	34.502	27.264	36.304	44.944	119	189.	29.2	2.42	37.4	1342.	2231	2300	
126	704	699	4.969	4.912	34.494	27.284	36.337	44.987	126	184.	30.3	2.40	37.0				
224	748	744	4.717	4.658	34.488	27.308	36.374	45.036	137	175.	32.2	2.37	36.2				
127	804	799	4.474	4.411	34.494	27.340	36.418	45.092	147	167.	32.9	2.35	35.4				
128	904	898	4 246	4.176	34.542	27.403	36.492	45.177	158	157.	33.9	2.28	34.2				
129	1005	998	4.212	4.134	34.594	27.449	36.540	45.226	160	156.	33 4	2 25	33.4				
130	1155	1147	4.207	4.116	34.711	27.544	36.634	45.319	173	143.	30.4	2.07	30.9				
131	1306	1296	4.198	4.094	34.842	27.651	36.739	45.423			25.5	1.83	27.2				
132	1507	1495	4.015	3.894	34.919	27.733	36.830	45.523									
133	1708	1693	3.850	3.712	34.953	27.778	36.885	45.586	236	82.	20.5	1.47	21.8				
134	1911	1893	3.571	3.418	34.951	27.806	36.928	45.643	242	78.	23.0	1.45	21 4				
135	2111	2090	3.265	3.098	34.942	27.830	36.969	45.700	244	79.	27.7	1.46	21 5				
136	2312	2288	3.027	2.845	34.929	27.843	36.995	45.740	243	82.	32.9	1.50	21.9				
137	2514	2487	2.871	2.672	34.920	27.851	37.013	45.766	241	86.	36.7	1.52	22 3				
138	2767	2736	2.724	2.503	34.912	27.859	37.030	45.792	243	85.	39.9	1.54	22.5				
139	3021	2985	2.607	2.363	34.905	27.866	37.045	45.814	240	89.	42.5	1.56	22 8				
140	3277	3236	2.515	2.266	34.900	27.872	37.057	45.832	240	90.	44.9	1.57	22 9				
141	3532	3486	2.450	2.155	34.895	27.875	37.065	45.845									
142	3786	3734	2.416	2.094	34.892	27.878	37.071	45.854	242	89.	47.6	1.52	22.9				
143	4042	3984	2 354	2.005	34.887	27.881	37.079	45.867	244	88.	48.8	1.50	22.9				
144	4297	4234	2.315	1.938	34.882	27.882	37.085	45.876	244	89.	50.2	1.52	23.0				
145	4553	4483	2.262	1.856	34.882	27.889	37.095	45.891	245	88.	51.9	1.53	23 0				
146	4758	4682	2.272	1.841	34.873	27.882	37.091	45.887	245	89.	52.6	1.54	23.0				
147	4962	4882	2.296	1.838	34.873	27.883	37.091	45.887	245	89.	52.9	1.54	23.0				
148	5116	5031	2.314	1.836	34.873	27.883	37.091	45.887	245	89.	53.0	1.54	23.1	794	2203	2354	2199

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 15 Latitude 6-25.4 S Longitude 2- 2.7 W Date 10/13/83 Bottom Depth 4378 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - -	- - -	uM/KG -	- - - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	1	1	22.031	22.031	35.915	24.906	33.285	41.305	223	-7.							
212	3	2	22.164	22.163	35.911	24.866	33.241	41.258	224	-9.	2.0	0.23	0.0	312.	2039.	2370	
213	20	20	22.052	22.048	35.911	24.898	33.277	41.296	224	-8.	2.0	0.22	0.0	312.	2042.	2374	
214	52	52	21.407	21.397	35.945	25.106	33.503	41.540	192	26.	2.6	0.48	3.7				
215	80	80	17.090	17.077	35.684	26.022	34.557	42.723	102	135.	6.1	1.27	18.4				
216	123	123	13.993	13.975	35.405	26.506	35.154	43.425	90	162.	8.4	1.49	23.0				
217	167	166	13.025	13.002	35.283	26.612	35.298	43.606									
253	218	217	11.820	11.792	35.141	26.739	35.474	43.828	87	177.	11.1	1.69	26.6				
219	278	277	10.746	10.712	35.012	26.837	35.618	44.014	70	201.	13.3	1.90	30.5				
220	347	346	9.506	9.467	34.869	26.940	35.775	44.222	66	212.	15.6	2.09	33.7				
221	417	415	8.333	8.289	34.761	27.043	35.931	44.428	47	239.	19.2	2.36	38.3				
222	483	480	7.497	7.449	34.680	27.103	36.031	44.565	63	229.	21.2	2.39	38.6				
223	547	544	6.576	6.526	34.601	27.169	36.141	44.717	78	220.	23.9	2.45	39.0				
126	604	600	6.135	6.081	34.564	27.198	36.192	44.788	93	208.	25.1	2.45	38.3				
224	647	643	5.748	5.692	34.535	27.224	36.237	44.851	103	201.	26.7	2.45	38.2				
127	704	700	5.416	5.357	34.515	27.249	36.279	44.908	111	196.	28.2	2.45	37.8				
128	805	799	4.744	4.680	34.492	27.309	36.373	45.035	134	178.	31.8	2.40	36.6				
129	905	899	4.404	4.333	34.512	27.363	36.444	45.122	145	169.	33.9	2.37	35.7				
130	1005	998	4.191	4.113	34.591	27.449	36.541	45.228	156	160.	33.9	2.27	33.8				
131	1105	1097	4.146	4.060	34.678	27.524	36.617	45.305	166	150.	32.0	2.14	32.0				
132	1206	1197	4.112	4.017	34.771	27.602	36.696	45.385	181	135.	29.0	1.95	29.3				
133	1406	1395	4.021	3.909	34.875	27.696	36.794	45.486	206	111.	25.3	1.72	25.7				
134	1608	1594	3.809	3.681	34.931	27.764	36.872	45.575	227	91.	23.3	1.53	23.0				
135	1808	1792	3.566	3.423	34.942	27.799	36.920	45.635	237	83.	24.5	1.48	22.0				
136	2009	1990	3.339	3.181	34.942	27.822	36.956	45.684	243	79.	27.0	1.44	21.5				
137	2210	2188	3.152	2.978	34.934	27.835	36.980	45.717	242	82.	30.5	1.47	21.8				
138	2411	2385	2.929	2.739	34.923	27.847	37.006	45.755	241	85.	35.4	1.50	22.3				
139	2613	2584	2.781	2.574	34.915	27.856	37.023	45.781	241	86.	38.5	1.50	22.5				
140	2811	2778	2.687	2.462	34.911	27.862	37.035	45.799	239	89.	40.8	1.52	22.7				
141	3010	2974	2.598	2.355	34.905	27.866	37.046	45.815									
142	3208	3169	2.526	2.264	34.901	27.871	37.055	45.829	240	90.	44.6	1.53	22.9				
143	3404	3361	2.465	2.184	34.897	27.874	37.063	45.841	242	89.	46.1	1.54	23.0				
144	3600	3552	2.428	2.127	34.894	27.877	37.068	45.850	240	91.	47.2	1.54	23.0				
145	3799	3747	2.375	2.053	34.890	27.879	37.075	45.860	241	91.	49.1	1.54	23.0				
146	3995	3938	2.368	2.024	34.888	27.880	37.078	45.864	242	90.	49.4	1.54	23.0				
147	4195	4134	2.351	1.984	34.886	27.882	37.081	45.870	242	90.	50.2	1.53	23.0				
148	4432	4365	2.305	1.912	34.884	27.886	37.089	45.882	243	90.	50.3	1.54	23.1				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 16 Latitude 7-33.0 S Longitude 1- 7.8 W Date 10/13/83 Bottom Depth 4442 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	2	1	22.012	22.012	35.802	24.826	33.207	41.229	224	-8.							
212	2	2	21.975	21.975	35.794	24.830	33.212	41.235	224	-8.	2.0	0.22	0.1	311.	2039.	2370.	2031.
213	26	26	21.834	21.829	35.800	24.875	33.262	41.288	217	0.	2.0	0.27	0.8	320.	2041.	2365	
214	52	52	20.403	20.393	35.823	25.286	33.714	41.780	183	39.	2.7	0.55	5.4	385.	2076.	2361.	
215	74	74	16.403	16.391	35.607	26.125	34.684	42.873	94	146.	6.2	1.34	19.3	700.			
216	98	98	14.722	14.707	35.502	26.424	35.044	43.289	85	163.	7.8	1.48	22.4	790.	2182.	2332	
217	123	123	14.160	14.142	35.430	26.490	35.131	43.397	79	172.	9.0	1.56	23.9				
253	149	148	13.767	13.746	35.395	26.547	35.203	43.483	84	169.	9.1	1.54	23.5	836.	2180.	2320	
219	178	177	13.033	13.008	35.286	26.614	35.299	43.606	91	166.	9.6	1.58	24.1	854.			
220	218	217	12.010	11.981	35.152	26.711	35.439	43.785	93	170.	10.7	1.69	25.9	911.	2197.	2323	
221	288	287	10.828	10.793	35.016	26.826	35.603	43.996	84	186.	12.8	1.84	29.0	1040.	2203.	2308.	
222	372	371	9.185	9.144	34.840	26.970	35.820	44.280	61	219.	16.5	2.18	34.6	1323.			
223	448	446	8.326	8.279	34.758	27.042	35.931	44.428	48	238.	19.4	2.37	37.8	1517.	2244.	2296.	
126	551	547	6.628	6.577	34.602	27.163	36.133	44.706	74	224.	23.9	2.48	39.2				
224	603	599	6.062	6.009	34.555	27.200	36.198	44.797	93	209.	25.7	2.52	38.2	1421.	2250.	2312.	
127	651	647	5.443	5.388	34.512	27.243	36.271	44.899	114	192.	28.2	2.46	37.4				
128	751	746	4.830	4.770	34.485	27.293	36.353	45.010	133	178.	31.6	2.43	36.6	1294.	2220.	2293.	2221.
129	902	896	4.262	4.193	34.514	27.380	36.468	45.153	155	160.	34.6	2.34	34.6	1182.	2219.	2306	
130	1052	1045	4.132	4.051	34.597	27.460	36.555	45.245	161	155.	34.5	2.26	33.0				
131	1202	1193	4.089	3.995	34.726	27.569	36.664	45.355	176	140.	31.3	2.05	30.2				
132	1351	1340	4.020	3.913	34.826	27.657	36.755	45.448	194	123.	28.0	1.84	27.3				
133	1500	1487	3.871	3.752	34.913	27.743	36.848	45.547	221	97.	23.9	1.60	23.6				
134	1701	1686	3.656	3.522	34.934	27.782	36.899	45.610	233	87.	24.3	1.51	22.2				
135	1899	1881	3.434	3.284	34.937	27.808	36.937	45.659	239	83.	26.4	1.49	21.6	780.	2172.	2321.	2168.
136	2102	2082	3.220	3.055	34.931	27.825	36.966	45.700	241	82.	30.0	1.50	21.8				
137	2306	2282	3.073	2.891	34.924	27.835	36.985	45.727	241	84.	32.8	1.50	21.9				
138	2511	2484	2.928	2.728	34.918	27.844	37.003	45.754	240	86.	36.3	1.52	22.2				
139	2715	2684	2.770	2.553	34.911	27.854	37.023	45.782	239	89.	40.1	1.54	22.5				
140	2915	2881	2.639	2.405	34.905	27.862	37.039	45.806	239	90.	43.1	1.55	22.7				
141	3118	3080	2.545	2.292	34.899	27.867	37.050	45.822	239	91.	45.2	1.56	22.8				
142	3320	3278	2.495	2.222	34.896	27.870	37.057	45.833	239	91.	46.8	1.55	22.9				
143	3525	3479	2.451	2.157	34.894	27.874	37.064	45.844	238	93.	48.5	1.56	23.1				
144	3730	3680	2.404	2.089	34.891	27.877	37.071	45.854	238	93.	50.4	1.57	23.1				
145	3934	3879	2.366	2.029	34.886	27.878	37.075	45.862	239	93.	50.0	1.57	23.2				
146	4136	4076	2.359	1.999	34.886	27.880	37.079	45.867	241	91.	50.9	1.57	23.1				
147	4340	4275	2.366	1.982	34.885	27.881	37.081	45.870	241	91.	51.4	1.56	23.1				
148	4505	4436	2.374	1.970	34.884	27.881	37.082	45.871	241	91.	51.6	1.56	23.1	797.	2197.	2346.	2203.

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 17 Latitude 8-38.4 S Longitude 0-11.7 W Date 10/14/83 Bottom Depth 5006 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	2	2	21.589	21.589	36.258	25.291	33.679	41.707	225	-8.							
211	3	3	21.674	21.673	36.258	25.267	33.652	41.678	224	-7.	1.4	0.18	0.0	299.	2049.	2397.	
212	21	21	21.470	21.466	36.253	25.321	33.713	41.744	225	-7.	1.4	0.19	0.0	299.	2045.	2392	
213	49	49	21.044	21.035	36.188	25.391	33.795	41.839	209	10.	2.0	0.32	1.9				
214	81	81	15.824	15.811	35.627	26.274	34.853	43.060	101	142.	6.4	1.36	20.0				
215	120	120	14.323	14.305	35.439	26.462	35.097	43.357	96	154.	7.8	1.49	22.3				
216	164	164	13.013	12.990	35.290	26.620	35.307	43.614	96	161.	9.2	1.58	23.9				
217	195	194	12.369	12.343	35.206	26.683	35.396	43.728	94	167.	10.1	1.65	25.0				
253	239	238	11.328	11.298	35.112	26.809	35.564	43.936	60	207.	12.6	1.92	30.1				
219	289	288	10.579	10.544	34.997	26.855	35.644	44.046	69	203.	13.6	1.98	31.1				
221	328	327	9.963	9.925	34.930	26.911	35.725	44.153	43	233.	15.6	2.20	34.8				
222	376	374	9.379	9.337	34.868	26.961	35.801	44.254	37	242.	17.0	2.33	36.9				
223	445	443	8.129	8.083	34.742	27.059	35.957	44.463	43	244.	20.0	2.47	39.1				
126	548	545	6.870	6.818	34.630	27.152	36.111	44.672	55	241.	23.7	2.60	40.8				
224	646	642	5.572	5.517	34.528	27.240	36.262	44.884	102	204.	27.9	2.54	38.9				
127	750	745	4.910	4.849	34.491	27.289	36.345	44.998	134	177.	30.9	2.43	36.8				
128	850	845	4.455	4.389	34.499	27.347	36.425	45.101	147	167.	33.8	2.39	35.3				
129	1002	994	4.206	4.128	34.553	27.417	36.508	45.195	156	160.	34.8	2.34	34.3				
130	1202	1193	4.102	4.008	34.713	27.557	36.652	45.342	171	145.	31.8	2.11	30.6				
131	1403	1392	3.949	3.838	34.827	27.665	36.767	45.464	194	123.	28.5	1.87	27.3				
132	1603	1589	3.785	3.658	34.914	27.753	36.863	45.567	222	97.	25.1	1.61	23.6				
133	1803	1787	3.570	3.427	34.930	27.789	36.910	45.625	232	88.	26.1	1.54	22.7				
134	2005	1986	3.353	3.195	34.930	27.811	36.945	45.672	236	86.	28.5	1.53	22.3				
135	2202	2180	3.143	2.969	34.928	27.830	36.976	45.714	237	87.	32.2	1.53	22.3				
136	2402	2377	2.979	2.789	34.924	27.844	36.999	45.746	237	89.	35.5	1.53	22.3				
137	2602	2573	2.830	2.623	34.917	27.853	37.017	45.773	237	90.	38.4	1.54	22.4				
138	2801	2769	2.701	2.477	34.910	27.860	37.033	45.796	238	90.	41.6	1.56	22.7				
139	2998	2963	2.601	2.359	34.905	27.866	37.045	45.814	239	90.	44.2	1.56	22.9				
140	3185	3146	2.520	2.261	34.901	27.871	37.056	45.830	237	93.	46.2	1.58	23.0				
141	3389	3345	2.459	2.180	34.897	27.875	37.064	45.842	236	95.	48.5	1.59	23.2				
142	3591	3544	2.413	2.113	34.893	27.877	37.070	45.851	235	96.	50.0	1.60	23.4				
143	3797	3745	2.371	2.049	34.889	27.879	37.075	45.860	238	94.	50.8	1.60	23.3				
144	4003	3946	2.355	2.011	34.891	27.884	37.082	45.869									
145	4208	4146	2.357	1.989	34.885	27.881	37.080	45.869	237	95.	52.1	1.59	23.3				
146	4415	4348	2.366	1.973	34.885	27.882	37.082	45.871	238	94.	52.9	1.59	23.3				
147	4622	4550	2.379	1.961	34.884	27.882	37.083	45.873	238	95.	52.9	1.59	23.3				
148	5038	4955	2.393	1.923	34.882	27.883	37.087	45.879									

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 18 Latitude 9-45.6 S Longitude 0-46.0 E Date 10/15/83 Bottom Depth 5538 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
201	2	2	21.264	21.264	36.084	25.248	33.648	41.686	225	-6.	2.1	0.18	0.0	310.	2039.	2373	
202	17	17	21.272	21.269	36.085	25.248	33.647	41.686	225	-6.	2.0	0.17	0.0	310.	2038.	2372	
203	39	39	20.868	20.861	36.189	25.439	33.849	41.897	224	-4.	2.0	0.19	0.0				
204	50	50	20.869	20.859	36.342	25.556	33.964	42.011	212	8.	2.2	0.22	0.9				
205	68	68	17.127	17.116	35.792	26.096	34.628	42.791	114	122.	6.3	1.12	17.2				
206	82	82	14.383	14.371	35.468	26.471	35.103	43.360	84	166.	8.5	1.42	23.2				
207	97	96	13.902	13.888	35.396	26.518	35.169	43.443	80	173.	9.2	1.48	24.3	851.	2180.	2316	
208	127	126	12.943	12.926	35.271	26.619	35.308	43.618	73	185.	10.7	1.59	26.5				
209	157	156	12.240	12.219	35.190	26.695	35.413	43.749	71	191.	11.4	1.65	27.7	989.	2192.	2304	
210	206	205	11.465	11.439	35.090	26.765	35.516	43.883	68	198.	12.6	1.78	29.5				
211	256	255	10.804	10.773	35.018	26.831	35.609	44.003	78	192.	13.2	1.82	29.6	1072.	2199.	2299	
212	305	304	10.241	10.205	34.955	26.882	35.685	44.101	62	212.	14.8	1.96	32.5				
213	356	354	9.617	9.576	34.885	26.934	35.765	44.207	54	224.	16.4	2.12	34.5				
214	405	403	9.048	9.003	34.824	26.980	35.836	44.303	60	221.	17.3	2.17	35.2				
215	455	453	8.529	8.481	34.773	27.023	35.902	44.391	52	233.	18.8	2.31	37.3				
216	504	502	7.771	7.720	34.705	27.084	35.999	44.521	47	243.	21.1	2.46	39.8	1607.	2241.	2285	
217	555	552	6.986	6.933	34.638	27.143	36.096	44.652	52	243.	23.8	2.57	41.0				
293	621	618	6.301	6.245	34.577	27.187	36.173	44.761	70	230.	25.5	2.56	40.2	1548.	2236.	2285	
219	682	677	5.682	5.623	34.539	27.236	36.252	44.869	87	218.	28.0	2.56	39.9				
220	747	742	5.217	5.155	34.514	27.272	36.312	44.951	103	205.	30.4	2.54	38.9	1443.	2229.	2287	
221	822	816	4.790	4.724	34.504	27.314	36.375	45.034	121	190.	32.6	2.50	37.7	1361.	2225.	2291.	
222	872	866	4.500	4.431	34.510	27.351	36.427	45.100	132	182.	34.1	2.46	36.9				
223	947	940	4.337	4.263	34.534	27.388	36.472	45.153	140	175.	35.0	2.41	35.9				
136	1056	1048	4.110	4.029	34.609	27.472	36.568	45.259	153	163.	35.6	2.28	33.8				
224	1248	1238	3.932	3.835	34.745	27.600	36.704	45.402	176	142.	32.8	2.06	30.0				
137	1456	1444	3.835	3.721	34.870	27.712	36.819	45.521	206	112.	28.0	1.74	25.6				
128	1630	1615	3.687	3.559	34.910	27.760	36.875	45.584	220	99.	27.1	1.61	23.7				
129	1805	1788	3.513	3.371	34.926	27.791	36.916	45.634	230	91.	27.4	1.54	22.8				
130	1982	1963	3.342	3.186	34.930	27.812	36.946	45.673	234	88.	29.6	1.53	22.4				
131	2158	2136	3.137	2.968	34.928	27.831	36.977	45.715	234	90.	33.1	1.53	22.4	804.	2176.	2320	
132	2334	2310	2.972	2.789	34.922	27.842	36.998	45.745	235	91.	36.4	1.53	22.5				
133	2510	2483	2.860	2.662	34.918	27.850	37.013	45.766	235	92.	38.9	1.54	22.5				
134	2710	2680	2.740	2.524	34.912	27.858	37.027	45.788	236	92.	41.5	1.56	22.7				
135	2908	2874	2.627	2.394	34.905	27.863	37.040	45.808	236	93.	44.1	1.56	22.9				
126	3108	3070	2.535	2.283	34.900	27.869	37.052	45.825	236	94.	46.7	1.54	22.9				
127	3310	3268	2.463	2.192	34.896	27.873	37.061	45.839									
138	3514	3468	2.399	2.108	34.892	27.877	37.070	45.852	234	97.	51.3	1.60	23.4	810.	2199.	2346	
139	3717	3667	2.356	2.044	34.889	27.879	37.076	45.861	234	98.	52.4	1.61	23.4				
140	3917	3862	2.347	2.013	34.887	27.880	37.078	45.866	234	98.	53.1	1.61	23.4				
141	4120	4060	2.347	1.989	34.888	27.883	37.082	45.871									
142	4325	4260	2.350	1.968	34.884	27.881	37.082	45.871	236	97.	53.7	1.60	23.4				
143	4531	4461	2.360	1.953	34.883	27.882	37.083	45.874	237	96.	53.6	1.60	23.4				
144	4736	4661	2.367	1.935	34.883	27.883	37.086	45.877									
145	4941	4861	2.383	1.925	34.883	27.884	37.087	45.879	239	94.	52.3	1.60	23.2				
146	5143	5057	2.399	1.915	34.879	27.882	37.085	45.878	241	92.	53.2	1.59	23.1				
147	5345	5253	2.415	1.904	34.878	27.882	37.086	45.879	241	92.	53.3	1.59	23.0				
148	5624	5524	2.445	1.896	34.877	27.881	37.086	45.880						802.	2199.		

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 19 Latitude 10-59.6 S Longitude 0-49.2 E Date 10/15/83 Bottom Depth 5606 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	1	1	21.062	21.062	36.310	25.476	33.878	41.920	225	-6.							
212	2	2	21.043	21.043	36.310	25.481	33.884	41.927	225	-6.	1.7	0.22	0.0	301.	2047.	2393.	
213	24	24	21.007	21.002	36.307	25.490	33.894	41.938	226	-7.	1.4	0.22	0.0	300.	2046.	2392.	
214	50	50	20.996	20.986	36.306	25.494	33.898	41.942	224	-5.	1.4	0.23	0.0				
215	77	76	20.680	20.665	36.294	25.572	33.986	42.039	211	10.	1.9	0.37	1.6				
216	108	108	14.969	14.953	35.623	26.464	35.073	43.308	89	158.	6.9	1.52	22.2				
217	137	136	12.960	12.941	35.323	26.656	35.343	43.652	72	186.	9.4	1.78	26.9				
253	166	166	11.983	11.961	35.194	26.748	35.475	43.822	63	200.	10.8	1.88	28.8				
219	196	195	11.357	11.332	35.097	26.791	35.545	43.916	57	210.	12.2	1.97	31.0				
220	245	244	10.372	10.343	34.974	26.873	35.669	44.080	67	206.	13.7	2.03	31.7				
221	296	294	9.789	9.755	34.907	26.921	35.744	44.179	66	211.	15.0	2.09	32.9				
222	344	342	9.277	9.239	34.850	26.962	35.808	44.264	60	220.	16.1	2.19	34.5				
223	392	390	8.743	8.701	34.795	27.005	35.875	44.355	58	225.	17.6	2.27	36.2				
136	497	494	7.501	7.452	34.679	27.102	36.030	44.564	54	238.	21.6	2.46	39.5				
224	639	635	5.752	5.697	34.542	27.229	36.242	44.855	79	225.	27.7	2.59	40.7				
137	794	789	4.668	4.605	34.506	27.328	36.396	45.061	121	191.	33.5	2.48	38.0				
128	991	984	4.180	4.104	34.569	27.433	36.525	45.213	140	176.	36.5	2.39	35.9				
129	1190	1181	3.989	3.897	34.703	27.561	36.661	45.357	161	156.	34.9	2.16	32.2				
130	1391	1380	3.867	3.758	34.847	27.689	36.795	45.496	197	121.							
131	1592	1578	3.701	3.576	34.909	27.757	36.871	45.580	217	102.	27.5	1.64	24.2				
132	1792	1775	3.535	3.394	34.926	27.789	36.912	45.629	226	95.	28.2	1.57	23.3				
133	1987	1968	3.334	3.178	34.931	27.813	36.948	45.676	229	93.	30.6	1.55	22.9				
134	2229	2206	3.122	2.946	34.930	27.834	36.981	45.720	234	90.	33.9	1.53	22.6				
135	2456	2430	2.961	2.766	34.924	27.846	37.003	45.751	232	94.	37.0	1.55	22.8				
126	2713	2682	2.778	2.561	34.915	27.857	37.025	45.783	237	90.	40.8	1.55	22.9				
127	2968	2932	2.618	2.379	34.903	27.863	37.041	45.809	239	90.	44.4	1.57	23.3				
138	3225	3185	2.481	2.218	34.897	27.872	37.058	45.835	234	96.	48.9	1.61	23.6				
139	3484	3438	2.395	2.107	34.893	27.877	37.070	45.853	235	96.	50.9	1.61	23.6				
140	3746	3695	2.362	2.046	34.890	27.880	37.076	45.862	234	98.	51.7	1.62	23.6				
141	4012	3955	2.358	2.012	34.889	27.882	37.080	45.867	234	98.	52.5	1.62	23.5				
142	4272	4209	2.360	1.994	34.889	27.884	37.084	45.872	237	95.	52.9	1.62	23.5				
143	4529	4459	2.368	1.961	34.885	27.883	37.084	45.874	238	95.	53.2	1.61	23.5				
144	4786	4709	2.383	1.944	34.885	27.884	37.086	45.877	240	93.	53.4	1.61	23.4				
145	5042	4958	2.400	1.929	34.883	27.884	37.086	45.878	241	92.	53.2	1.61	23.3				
146	5243	5154	2.416	1.919	34.881	27.883	37.086	45.879	240	93.	53.1	1.60	23.3				
147	5445	5350	2.432	1.907	34.880	27.883	37.087	45.880	243	90.	52.8	1.60	23.2				
148	5702	5599	2.460	1.900	34.880	27.883	37.088	45.881	248	85.	52.5	1.59	23.4				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 20 Latitude 11-59.9 S Longitude 0-51.7 E Date 10/16/83 Bottom Depth 5613 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
									- - -	- - -	uM/KG -	- - -	- - -				
125	2	1	20.761	20.761	36.367	25.602	34.012	42.062	225	-5.							
211	2	2	20.774	20.774	36.363	25.595	34.005	42.054						296.	2050.	2401.	
212	2	2	20.775	20.775	36.365	25.596	34.007	42.056	225	-5.	1.9	0.20	0.0				2049.
213	35	35	20.772	20.765	36.365	25.599	34.010	42.059	225	-5.	1.8	0.20	0.0	298.	2049.	2398.	
214	71	71	19.582	19.569	36.422	25.962	34.408	42.490	196	29.	2.4	0.62	5.2				
215	108	107	14.118	14.102	35.470	26.530	35.172	43.438	60	191.	8.7	1.73	26.2	944.	2200.	2322	
216	147	146	12.411	12.391	35.228	26.691	35.401	43.731	45	216.	11.1	1.96	30.3	1147.	2219.	2311.	
217	187	186	11.624	11.600	35.130	26.766	35.510	43.870	48	217.	12.4	2.00	31.3				
253	232	231	10.695	10.667	35.010	26.844	35.626	44.024	57	214.	13.4	2.00	31.0				
219	282	281	10.143	10.110	34.947	26.892	35.699	44.119	55	219.	14.8	2.11	33.2	1284.	2221.	2296.	
220	336	335	9.430	9.392	34.869	26.952	35.791	44.241	47	232.	16.6	2.25	35.7				
221	387	385	8.859	8.817	34.809	26.998	35.863	44.337	43	240.	18.2	2.35	37.4	1522.	2242.	2294.	2241
222	437	434	8.222	8.177	34.745	27.047	35.941	44.443	47	240.	19.7	2.42	38.4				
223	497	494	7.286	7.238	34.665	27.122	36.060	44.603	57	236.	22.1	2.50	39.5				
136	589	586	6.496	6.442	34.607	27.185	36.161	44.740	64	235.	25.0	2.60	40.7	1622.	2243.	2286	
224	697	692	5.274	5.216	34.515	27.266	36.303	44.939	96	212.	30.1	2.58	39.6	1496.	2239.	2293	
137	771	766	4.900	4.838	34.506	27.302	36.358	45.012	114	197.	32.2	2.54	38.5	1419.	2228.	2289.	2233
128	873	867	4.427	4.359	34.518	27.365	36.445	45.121	134	180.	35.1	2.46	36.6				
129	987	980	4.133	4.057	34.572	27.440	36.534	45.224	151	165.	36.2	2.35	34.6				
130	1085	1077	4.000	3.917	34.643	27.511	36.611	45.307	162	155.	35.7	2.23	32.8				
131	1238	1228	3.861	3.766	34.755	27.615	36.722	45.424	180	138.	33.6	2.03	29.7	1040.	2207.	2312.	
132	1489	1476	3.763	3.647	34.877	27.725	36.836	45.541	207	112.	28.9	1.73	25.5				
133	1739	1723	3.598	3.461	34.927	27.783	36.903	45.617	227	93.	27.0	1.58	23.1				
134	1995	1976	3.309	3.152	34.932	27.817	36.953	45.682	231	92.				817.	2180.		2181.
135	2246	2223	3.109	2.932	34.922	27.829	36.977	45.717	236	88.	34.0	1.55	22.6				
126	2498	2471	2.924	2.726	34.917	27.844	37.003	45.753	239	87.	37.2	1.53	22.6				
127	2751	2720	2.745	2.525	34.908	27.854	37.024	45.785	237	91.	41.3	1.56	22.8	799.	2186.	2333.	
138	3004	2968	2.606	2.363	34.901	27.863	37.041	45.810	235	94.	45.6	1.60	23.2				
139	3255	3214	2.482	2.216	34.895	27.870	37.057	45.834	232	98.	50.1	1.63	23.6				
140	3494	3448	2.397	2.108	34.891	27.876	37.069	45.851	235	96.	52.3	1.63	23.6	811.	2208.	2355.	2207.
141	3743	3692	2.362	2.047	34.889	27.879	37.075	45.861	235	97.	52.1	1.61	23.4				
142	3995	3938	2.357	2.013	34.889	27.882	37.080	45.867	237	95.	52.5	1.61	23.3				
143	4244	4181	2.364	1.992	34.887	27.882	37.081	45.870	237	95.	53.0	1.60	23.4	798.	2203.	2353.	
144	4496	4427	2.376	1.973	34.886	27.883	37.083	45.872	237	95.	53.1	1.61	23.3				
145	4753	4677	2.392	1.957	34.885	27.883	37.084	45.875	239	94.	53.1	1.61	23.3				
146	4999	4917	2.407	1.941	34.882	27.882	37.084	45.875	240	93.	53.2	1.59	23.3				
147	5304	5212	2.428	1.922	34.881	27.883	37.086	45.878	241	92.	53.0	1.58	23.2				
148	5699	5596	2.458	1.899	34.878	27.882	37.087	45.880	245	88.	52.8	1.58	23.0	787.	2194.	2345.	2205.

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 21 Latitude 12-59.9 S Longitude 0-55.1 E Date 10/16/83 Bottom Depth 5486 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	3	2	19.990	19.989	36.464	25.883	34.316	42.385	230	-7.							
212	3	3	19.992	19.991	36.463	25.882	34.314	42.384	231	-8.	1.1	0.25	0.1	308.	2059.	2402.	
213	50	49	19.780	19.771	36.447	25.928	34.367	42.444	227	-3.	1.1	0.32	0.8	320.	2065.	2399	
214	76	75	19.594	19.580	36.414	25.953	34.398	42.481	218	7.	1.6	0.47	2.4				
215	99	99	16.411	16.395	35.852	26.312	34.868	43.054	134	106.	4.6	1.23	16.3				
216	123	122	13.839	13.821	35.420	26.550	35.203	43.480	57	196.	8.3	1.80	27.2				
217	147	147	12.710	12.690	35.263	26.659	35.358	43.676	33	226.	10.5	2.00	30.9				
253	188	187	12.103	12.078	35.193	26.725	35.448	43.790	41	222.	11.3	2.00	31.1				
219	237	235	10.899	10.870	35.037	26.828	35.603	43.992	40	230.	13.4	2.13	33.2				
220	287	285	10.072	10.038	34.938	26.897	35.707	44.131	32	243.	15.5	2.27	35.9				
221	337	335	9.324	9.286	34.857	26.960	35.803	44.258	33	247.	16.9	2.35	37.2				
222	405	403	8.395	8.352	34.759	27.031	35.917	44.411	40	246.	19.1	2.45	38.7				
223	495	492	6.970	6.923	34.629	27.137	36.090	44.648	57	238.	22.9	2.56	40.2				
136	601	598	6.018	5.965	34.554	27.205	36.205	44.806	72	230.	26.5	2.61	40.8				
224	692	688	5.214	5.157	34.509	27.268	36.308	44.947	93	215.	30.4	2.60	40.1				
137	802	796	4.646	4.583	34.499	27.325	36.394	45.060	119	193.	33.7	2.52	38.2				
128	953	946	4.168	4.095	34.549	27.418	36.510	45.199	144	172.	36.1	2.39	35.5				
129	1103	1095	3.908	3.824	34.648	27.524	36.630	45.330	161	157.	36.4	2.22	32.7				
130	1303	1293	3.845	3.744	34.793	27.648	36.755	45.457	180	138.	32.4	1.99	29.0				
131	1505	1492	3.752	3.634	34.874	27.724	36.835	45.541	202	117.	29.2	1.78	25.9				
132	1706	1690	3.603	3.469	34.909	27.768	36.888	45.601	217	103.	28.2	1.66	24.1				
133	1906	1888	3.405	3.255	34.922	27.799	36.930	45.654	226	96.	29.4	1.59	23.2				
134	2105	2084	3.224	3.058	34.924	27.819	36.960	45.694	230	93.	31.6	1.56	22.8				
135	2306	2282	3.068	2.886	34.920	27.832	36.982	45.724	234	91.	34.3	1.56	22.7				
126	2507	2479	2.911	2.712	34.916	27.844	37.004	45.755	235	91.	37.4	1.56	22.9				
127	2707	2676	2.783	2.567	34.910	27.852	37.020	45.779	234	93.	40.4	1.57	23.0				
138	2902	2867	2.655	2.422	34.904	27.860	37.036	45.802	235	94.	43.5	1.59	23.1				
139	3096	3058	2.546	2.295	34.898	27.866	37.048	45.821	233	97.	47.0	1.60	23.5				
140	3276	3235	2.472	2.204	34.894	27.870	37.058	45.835	231	99.	49.5	1.61	23.6				
141	3473	3428	2.424	2.136	34.891	27.873	37.065	45.845	234	97.	50.0	1.60	23.4				
142	3676	3626	2.398	2.089	34.891	27.877	37.071	45.854	234	97.	51.1	1.60	23.5				
143	3985	3928	2.374	2.031	34.889	27.880	37.078	45.864	235	97.	52.1	1.60	23.5				
144	4294	4230	2.378	1.999	34.887	27.881	37.080	45.868	235	97.	52.7	1.59	23.5				
145	4599	4527	2.391	1.975	34.884	27.881	37.081	45.870	237	95.	53.1	1.59	23.5				
146	4906	4826	2.404	1.950	34.882	27.881	37.083	45.874	239	94.	52.8	1.59	23.4				
147	5217	5128	2.424	1.930	34.881	27.882	37.085	45.876	239	94.	52.9	1.58	23.2				
148	5585	5486	2.462	1.918	34.880	27.882	37.085	45.878	241	92.	53.3	1.59	23.2				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 22 Latitude 14- 0.2 S Longitude 0-57.6 E Date 10/17/83 Bottom Depth 5409 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	1	1	19.022	19.022	36.185	25.923	34.388	42.490	235	-7.							
212	2	2	19.016	19.016	36.184	25.924	34.390	42.491	236	-8.	2.0	0.52	3.6	363.	2085.	2389.	
213	30	29	19.012	19.007	36.183	25.925	34.391	42.493	235	-7.	1.9	0.52	3.6	363.	2085.	2389.	
214	50	50	19.142	19.133	36.243	25.938	34.400	42.497	234	-7.	2.0	0.49	3.2				
215	75	75	19.098	19.085	36.283	25.982	34.444	42.542	227	0.	2.0	0.54	3.6	370.	2093.	2395.	
216	101	101	18.804	18.786	36.229	26.017	34.490	42.597	225	3.	2.1	0.62	4.8				
217	123	122	14.658	14.640	35.483	26.424	35.047	43.294	132	117.	5.7	1.29	18.5	676.	2160.	2335	
253	149	148	13.433	13.412	35.342	26.575	35.244	43.536	77	178.	8.0	1.64	25.0				
219	173	172	12.627	12.604	35.228	26.649	35.351	43.674	54	206.	10.2	1.87	29.2				
220	223	222	11.362	11.334	35.084	26.780	35.535	43.906	37	230.	13.1	2.07	33.0	1300.	2239.	2314.	
221	287	286	10.023	9.990	34.931	26.900	35.712	44.138	48	227.	15.2	2.15	34.3				
222	347	345	8.947	8.909	34.815	26.988	35.848	44.319	43	239.	17.8	2.30	37.2	1515.	2255.	2308	
223	422	420	7.967	7.924	34.717	27.063	35.969	44.482	50	238.	20.2	2.39	38.6	1557.	2254.	2303.	
136	529	526	6.772	6.722	34.603	27.144	36.107	44.674	74	223.	23.5	2.44	38.8	1509.	2249.	2302	
224	622	618	5.823	5.769	34.531	27.211	36.221	44.831	97	207.	26.7	2.47	38.6				
137	730	725	5.032	4.972	34.490	27.274	36.324	44.971	117	193.	30.9	2.47	38.1	1372.	2240.	2306.	
128	830	825	4.527	4.462	34.486	27.328	36.404	45.075	132	181.	34.5	2.43	37.1	1313.	2233.	2305.	
129	955	948	4.107	4.034	34.542	27.418	36.515	45.206	148	169.	37.2	2.37	35.4				
130	1105	1096	3.859	3.776	34.640	27.523	36.631	45.334	166	152.	37.3	2.20	32.5				
131	1306	1295	3.757	3.657	34.799	27.661	36.773	45.479	190	129.	32.5	1.92	28.3				
132	1507	1494	3.632	3.516	34.869	27.731	36.849	45.561	211	109.	29.8	1.73	25.4				
133	1708	1692	3.488	3.355	34.902	27.773	36.899	45.618	221	100.	29.6	1.65	24.0				
134	1909	1891	3.320	3.171	34.914	27.801	36.936	45.664	228	95.	31.0	1.59	23.3				
135	2107	2086	3.174	3.009	34.920	27.821	36.964	45.700	230	94.	33.3	1.58	23.2				
126	2310	2286	3.004	2.822	34.918	27.836	36.990	45.735	235	90.	35.9	1.56	23.0	807.	2186.	2331.	
127	2512	2485	2.866	2.667	34.911	27.844	37.006	45.760	236	91.	38.6	1.57	22.9				
138	2714	2683	2.742	2.526	34.906	27.853	37.023	45.783	236	92.	41.7	1.59	23.1				
139	2917	2883	2.627	2.393	34.901	27.860	37.037	45.805	234	95.	45.1	1.61	23.4				
140	3117	3078	2.537	2.284	34.898	27.867	37.050	45.823	232	98.	48.3	1.63	23.6				
141	3318	3275	2.448	2.177	34.893	27.872	37.061	45.839	230	101.	51.3	1.64	23.7				
142	3570	3522	2.393	2.096	34.892	27.878	37.071	45.854	234	97.	51.7	1.63	23.6				
143	3823	3769	2.370	2.046	34.889	27.879	37.076	45.861	236	96.	52.2	1.62	23.5				
144	4128	4068	2.364	2.005	34.888	27.882	37.080	45.868	236	96.	52.6	1.63	23.4				
145	4435	4367	2.376	1.980	34.884	27.880	37.080	45.869	237	95.	53.1	1.61	23.5				
146	4740	4664	2.396	1.963	34.884	27.882	37.083	45.873	237	96.	53.1	1.61	23.5				
147	5045	4961	2.409	1.937	34.882	27.882	37.085	45.876	239	94.	53.7	1.63	23.4				
148	5486	5389	2.450	1.919	34.881	27.883	37.086	45.878	241	92.	53.6	1.60	23.4	793.	2204.	2355.	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 23 Latitude 14-59.4 S Longitude 1- 0.0 E Date 10/17/83 Bottom Depth 5218 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - - -		uM/KG -	- - - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	2	2	19.045	19.045	36.146	25.887	34.353	42.453	236	-9.							
201	3	3	19.043	19.042	36.149	25.890	34.356	42.456	237	-10.	1.6	0.56	3.4	360.	2050.	2348.	
202	69	68	18.995	18.983	36.156	25.911	34.378	42.481	234	-6.	1.5	0.57	3.4				
203	79	79	19.043	19.029	36.221	25.948	34.414	42.514	225	2.	1.7	0.62	3.5				
204	99	99	17.239	17.222	35.868	26.128	34.656	42.815	189	47.	2.8	0.89	9.6				
205	123	122	14.558	14.540	35.442	26.414	35.041	43.292	137	112.	5.3	1.32	18.0				
206	147	147	13.454	13.433	35.316	26.550	35.219	43.511	41	214.	9.6	1.93	29.4				
207	172	172	12.932	12.908	35.263	26.616	35.306	43.616	27	231.	10.8	2.03	31.4				
208	222	221	11.591	11.563	35.093	26.745	35.490	43.852	47	219.	11.7	2.03	31.3				
209	272	271	10.572	10.539	34.968	26.834	35.622	44.025	56	216.	13.2	2.08	31.9				
221	311	310	9.769	9.733	34.885	26.908	35.732	44.168	57	220.	15.2	2.19	33.5				
210	312	310	9.851	9.815	34.895	26.902	35.722	44.155	53	223.	15.1	2.19	33.8				
222	357	355	8.816	8.777	34.795	26.994	35.860	44.336	51	232.	17.6	2.33	36.2				
223	447	444	7.454	7.410	34.667	27.099	36.029	44.564	67	225.	21.0	2.43	37.7				
136	553	549	6.280	6.230	34.560	27.176	36.163	44.751	78	222.	25.4	2.55	39.6				
224	647	643	5.398	5.344	34.500	27.239	36.270	44.900	113	194.	28.6	2.49	37.8				
137	754	749	4.754	4.694	34.485	27.302	36.365	45.026	120	192.	33.1	2.52	37.9				
129	854	848	4.290	4.224	34.495	27.361	36.448	45.132	138	177.	36.6	2.47	36.6				
130	954	947	4.036	3.964	34.533	27.418	36.519	45.214	148	169.	38.1	2.39	35.3				
131	1105	1097	3.828	3.745	34.646	27.531	36.640	45.344	162	157.	38.1	2.24	32.6				
132	1306	1295	3.700	3.601	34.780	27.652	36.767	45.476	186	133.	35.0	1.99	28.9				
133	1507	1494	3.605	3.489	34.862	27.728	36.848	45.561	209	111.	30.8	1.77	25.6				
134	1708	1692	3.501	3.368	34.899	27.770	36.895	45.613	220	101.	29.8	1.67	24.0				
135	1909	1890	3.340	3.191	34.914	27.799	36.933	45.660	226	96.	31.3	1.60	23.4				
126	2110	2088	3.165	3.000	34.917	27.819	36.963	45.700	230	94.	33.6	1.57	23.0				
127	2311	2286	3.020	2.838	34.914	27.831	36.984	45.729	234	91.	35.9	1.56	22.9				
138	2563	2534	2.822	2.619	34.906	27.844	37.009	45.765	235	92.	40.0	1.57	23.0				
139	2817	2784	2.663	2.438	34.901	27.856	37.031	45.796	233	96.	44.6	1.59	23.3				
140	3071	3033	2.515	2.268	34.894	27.865	37.049	45.823	232	98.	49.1	1.62	23.5				
141	3326	3283	2.422	2.150	34.890	27.872	37.062	45.842	231	100.	51.4	1.62	23.6				
142	3580	3532	2.380	2.082	34.890	27.877	37.071	45.855	235	97.	51.6	1.60	23.5				
143	3834	3780	2.370	2.044	34.888	27.878	37.075	45.860	234	98.	52.1	1.59	23.4				
144	4140	4079	2.368	2.007	34.887	27.881	37.079	45.866	236	96.	52.3	1.59	23.3				
145	4446	4378	2.378	1.981	34.884	27.880	37.080	45.869	237	95.	52.8	1.59	23.3				
146	4756	4679	2.396	1.961	34.884	27.882	37.083	45.873	238	95.	52.8	1.59	23.3				
147	5063	4978	2.414	1.940	34.881	27.881	37.083	45.875	240	93.	53.3	1.59	23.2				
148	5292	5200	2.434	1.929	34.879	27.880	37.083	45.875	240	93.	53.4	1.59	23.2				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 24 Latitude 16- 0.0 S Longitude 1- 0.9 E Date 10/18/83 Bottom Depth 5269 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
301	2	2	18.315	18.315	35.868	25.860	34.352	42.478	241	-10.	2.2	0.65	5.0	382.			
302	32	32	18.308	18.302	35.869	25.864	34.356	42.482	245	-14.	2.1	0.67	5.0	384.			
303	63	63	18.447	18.436	36.120	26.022	34.507	42.626	225	5.	2.6	0.72	6.1	401.			
304	113	113	16.781	16.762	35.764	26.158	34.703	42.878	200	38.	3.5	0.84	8.9	456.			
305	152	151	13.453	13.432	35.337	26.567	35.236	43.527	214	41.	11.4	2.00	31.0				
306	192	191	12.324	12.298	35.179	26.671	35.386	43.720	47	214.	11.1	1.94	29.9	1157.			
307	232	231	11.642	11.612	35.098	26.740	35.482	43.843	40	225.	12.8	2.06	32.0				
308	275	274	10.848	10.814	35.006	26.814	35.591	43.983	57	213.	13.1	2.03	31.3	1207.			
309	372	370	9.170	9.129	34.831	26.966	35.816	44.277	31	250.	18.1	2.37	37.8	1608.			
310	517	514	7.034	6.985	34.626	27.126	36.077	44.631	55	240.	23.7	2.57	40.2				
311	619	615	5.934	5.880	34.541	27.205	36.209	44.815	92	211.	26.7	2.52	39.0				
312	750	745	4.935	4.874	34.489	27.285	36.339	44.991	113	197.	32.2	2.54	38.5	1412.			
313	903	896	4.194	4.125	34.512	27.385	36.477	45.165	145	171.	37.1	2.43	36.0				
314	1104	1096	3.796	3.713	34.636	27.526	36.637	45.343	164	155.	39.1	2.24	32.6				
315	1306	1295	3.698	3.599	34.769	27.644	36.759	45.468	185	134.	35.1	2.01	29.2				
316	1558	1544	3.535	3.415	34.871	27.743	36.866	45.583	215	106.	31.2	1.74	25.1				
317	1810	1793	3.379	3.238	34.907	27.789	36.920	45.645									
353	2060	2039	3.161	3.001	34.919	27.821	36.965	45.701	233	91.	33.3	1.60	23.0	812.			
319	2311	2286	2.977	2.796	34.918	27.838	36.994	45.740	235	91.	36.5	1.59	22.9	810.			
320	2611	2582	2.784	2.577	34.911	27.852	37.019	45.777	237	90.	41.0	1.61	23.0				
321	3021	2983	2.561	2.318	34.902	27.867	37.048	45.820	234	96.	47.8	1.64	23.5	813			
322	3428	3383	2.437	2.154	34.895	27.875	37.065	45.845	232	99.	51.1	1.65	23.5				
323	3834	3780	2.388	2.062	34.895	27.883	37.078	45.863	236	96.	52.1	1.63	23.5	801.			
324	4240	4176	2.388	2.015	34.893	27.885	37.083	45.870	237	95.	52.9	1.62	23.4				
145	4598	4525	2.400	1.984	34.885	27.881	37.081	45.870	236	96.	53.0	1.61	23.4				
146	4598	4525	2.400	1.984	34.886	27.882	37.082	45.870	237	95.	53.0	1.61	23.4				
147	4962	4879	2.420	1.958	34.883	27.881	37.083	45.873	239	94.	53.1	1.61	23.3				
148	5356	5263	2.450	1.937	34.885	27.885	37.087	45.878	238	95.	53.0	1.60	23.3	792.			

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 25 Latitude 17- 0.3 S Longitude 1- 6 2 E Date 10/18/83 Bottom Depth 5546 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	ADU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	2	18.685	18.685	35.985	25.856	34.335	42.448	234	-5.							
212	3	3	18.684	18.684	35.985	25.856	34.335	42.448	233	-4.	1.9	0.66	5.0	386.			
211	3	3	18.684	18.683	35.985	25.856	34.335	42.448									
213	44	44	18.691	18.683	35.984	25.856	34.334	42.448	233	-4.	1.9	0.65	5.0	388.			
214	69	68	17.106	17.095	35.763	26.078	34.612	42.776	114	123.	6.2	1.42	18.0				
215	97	97	15.252	15.237	35.550	26.344	34.944	43.171	15	231.	10.6	1.93	29.3				
216	132	131	14.999	14.979	35.525	26.382	34.992	43.228	18	229.	10.6	1.95	29.3				
217	172	171	14.662	14.636	35.489	26.430	35.052	43.300	20	229.	10.8	1.94	29.7				
253	217	216	13.792	13.761	35.389	26.539	35.195	43.474	21	232.	11.3	1.99	30.8				
219	247	246	13.074	13.040	35.292	26.612	35.296	43.602	14	243.	12.0	2.10	32.5				
220	277	276	12.339	12.302	35.194	26.682	35.396	43.730	15	246.	12.7	2.11	33.4				
221	322	320	11.312	11.271	35.076	26.786	35.543	43.916	16	251.	14.3	2.20	34.8				
222	372	370	10.010	9.966	34.921	26.897	35.710	44.136	19	256.	16.7	2.37	37.0				
223	422	420	8.744	8.698	34.784	26.997	35.867	44.347	28	255.	19.3	2.46	39.0				
136	500	497	7.467	7.418	34.660	27.092	36.022	44.557	55	237.	21.6	2.49	39.0				
224	597	594	6.319	6.265	34.566	27.176	36.161	44.748	73	227.	25.4	2.53	39.8				
137	699	694	5.456	5.397	34.504	27.235	36.264	44.891	101	205.	28.8	2.53	38.7				
128	818	813	4.715	4.650	34.482	27.304	36.370	45.033	126	186.	33.4	2.47	37.8				
129	948	941	4.138	4.066	34.507	27.387	36.482	45.173	144	172.	37.7	2.40	35.9				
130	1097	1089	3.845	3.762	34.582	27.478	36.588	45.292	157	162.	39.9	2.30	33.9				
131	1297	1287	3.659	3.561	34.736	27.621	36.739	45.450	181	139.	37.1	2.03	29.8				
132	1498	1485	3.598	3.483	34.829	27.703	36.823	45.537	202	118.	32.9	1.80	26.6				
133	1696	1681	3.493	3.361	34.883	27.758	36.883	45.602	216	105.	31.0	1.66	24.5				
134	1890	1872	3.350	3.203	34.905	27.790	36.924	45.651	226	96.	31.2	1.58	23.5				
135	2082	2061	3.186	3.023	34.912	27.813	36.956	45.692	232	92.	32.7	1.54	23.0				
126	2280	2256	3.027	2.848	34.912	27.829	36.981	45.726	234	91.	35.5	1.51	22.8				
127	2476	2449	2.876	2.681	34.907	27.840	37.001	45.754	235	92.	38.6	1.57	22.9				
138	2726	2695	2.713	2.496	34.902	27.852	37.023	45.786	234	94.	43.0	1.57	23.2				
139	2977	2941	2.573	2.334	34.896	27.861	37.042	45.812	234	95.	46.8	1.60	23.4				
140	3220	3178	2.482	2.220	34.894	27.869	37.056	45.832	231	99.	49.7	1.62	23.6				
141	3380	3336	2.436	2.158	34.892	27.872	37.063	45.842	234	97.	49.7	1.60	23.4				
142	3634	3584	2.402	2.098	34.891	27.877	37.070	45.853	235	96.	50.8	1.59	23.4				
143	3888	3833	2.392	2.059	34.890	27.879	37.074	45.859	234	98.	51.7	1.59	23.5				
144	4198	4135	2.385	2.017	34.889	27.881	37.079	45.866	235	97.	51.8	1.62	23.4				
145	4507	4436	2.395	1.990	34.886	27.881	37.081	45.869	237	95.	52.4	1.60	23.3				
146	4816	4737	2.412	1.969	34.884	27.881	37.082	45.871	236	97.	52.7	1.60	23.4				
147	5228	5137	2.439	1.943	34.882	27.882	37.084	45.875	238	95.	53.2	1.59	23.3				
148	5618	5516	2.486	1.936	34.881	27.881	37.084	45.875	238	95.	53.4	1.61	23.4				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 26 Latitude 18- 0.0 S Longitude 1-10.2 E Date 10/19/83 Bottom Depth 5115 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	2	18.881	18.881	35.954	25.782	34.255	42.363	232	-4.	1.3	0.44	0.3				
212	3	3	18.882	18.881	35.947	25.777	34.250	42.358	234	-6.				342.	2062.	2375	
213	44	44	18.875	18.867	35.948	25.781	34.255	42.363	233	-4.				342.	2061.		
214	69	69	18.879	18.867	35.950	25.783	34.256	42.365	233	-4.	1.3	0.45	0.3				
215	100	99	18.878	18.860	35.950	25.785	34.258	42.366	233	-4.	1.3	0.47	0.3	340.	2055.	2368.	
216	134	133	16.651	16.629	35.649	26.102	34.652	42.832	213	26.	2.4	0.65	4.6				
217	173	172	14.248	14.223	35.300	26.373	35.013	43.277	174	77.	4.7	1.11	13.4	566.	2120.	2324.	
253	217	216	12.943	12.913	35.157	26.533	35.224	43.536	157	101.	6.1	1.29	16.7				
219	247	245	12.259	12.226	35.088	26.615	35.333	43.671	127	135.	8.0	1.53	21.3				
220	278	276	11.380	11.345	35.011	26.721	35.476	43.848	96	171.	10.5	1.80	26.1	969.	2191.	2306	
221	323	321	10.253	10.215	34.892	26.831	35.634	44.051	87	187.	12.8	1.97	29.2	1390			
222	373	371	9.073	9.032	34.774	26.936	35.792	44.258	75	206.	16.0	2.20	32.9				
223	423	421	8.119	8.075	34.693	27.022	35.921	44.428	69	219.	18.6	2.35	36.0	1424.	2235.	2296	
136	496	493	6.923	6.876	34.594	27.116	36.072	44.632	83	213.	22.0	2.43	37.5				
224	598	594	5.711	5.660	34.506	27.205	36.220	44.836	107	198.	26.6	2.46	37.6	1390.	2211.	2273	
137	695	690	4.978	4.922	34.469	27.263	36.316	44.966	130	180.	30.4	2.45	37.1				
128	816	810	4.310	4.247	34.466	27.336	36.422	45.104	150	165.	35.4	2.34	35.5	1234.	2210.	2289.	
129	946	939	3.899	3.829	34.512	27.416	36.523	45.225	165	153.	38.5	2.30	34.0				
130	1093	1085	3.768	3.686	34.593	27.494	36.608	45.316	174	145.	38.5	2.19	32.3	1092.	2210.	2308	
131	1296	1285	3.625	3.527	34.706	27.600	36.720	45.434	190	130.	37.5	2.01	29.6				
132	1493	1480	3.561	3.447	34.801	27.684	36.807	45.523	204	117.	34.1	1.84	27.0				
133	1692	1676	3.454	3.323	34.869	27.750	36.878	45.599	213	108.	32.4	1.73	25.5				
134	1895	1877	3.317	3.170	34.896	27.786	36.922	45.651	232	91.	31.1	1.58	23.3				
135	2100	2078	3.143	2.979	34.907	27.813	36.958	45.696	236	88.	33.2	1.55	22.7				
126	2301	2276	2.988	2.808	34.906	27.828	36.982	45.729	238	87.	35.7	1.54	22.6	801.	2179.	2325.	
127	2505	2477	2.841	2.644	34.899	27.837	37.000	45.755	239	88.	40.6	1.57	22.8				
138	2761	2729	2.679	2.460	34.895	27.849	37.023	45.787	239	89.	43.0	1.57	23.0				
139	3018	2981	2.546	2.304	34.891	27.859	37.042	45.814	237	93.	47.2	1.60	23.3				
140	3222	3181	2.481	2.219	34.889	27.865	37.052	45.828	235	95.	49.4	1.61	23.5	813.	2203.	2349.	
141	3424	3379	2.443	2.160	34.888	27.869	37.059	45.839	234	97.	50.7	1.62	23.5				
142	3526	3478	2.431	2.138	34.890	27.873	37.064	45.845	235	96.	51.2	1.61	23.5				
143	3932	3875	2.388	2.051	34.887	27.877	37.073	45.859	238	94.	51.4	1.61	23.4				
144	4341	4275	2.394	2.009	34.885	27.879	37.077	45.865	238	94.	51.7	1.61	23.4				
145	4547	4475	2.406	1.996	34.884	27.879	37.078	45.866	241	91.	52.0	1.61	23.4				
146	4851	4771	2.415	1.967	34.880	27.878	37.079	45.869	239	94.	52.3	1.60	23.4				
147	5049	4964	2.429	1.956	34.880	27.879	37.081	45.871	240	93.	52.7	1.60	23.3				
148	5251	5160	2.451	1.951	34.880	27.879	37.081	45.872	241	92.	52.7	1.59	23.3	793.	2201.	2352	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 27 Latitude 19- 0.8 S Longitude 1-13.2 E Date 10/19/83 Bottom Depth 5506 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
212	3	2	18.966	18.965	35.930	25.742	34.213	42.318	236	-8.	1.9	0.42	0.0	338.	2053.	2366.	
125	3	3	18.966	18.965	35.932	25.744	34.214	42.320	236	-8.							
213	23	23	18.965	18.961	35.930	25.743	34.214	42.320	236	-8.	1.9	0.41	0.0	333.	2052.	2369	
214	62	62	18.961	18.950	35.933	25.749	34.220	42.326	236	-8.	1.8	0.41	0.0				
215	77	77	18.979	18.965	35.946	25.755	34.225	42.331	235	-7.	1.8	0.42	0.0				
216	97	96	19.033	19.016	35.985	25.771	34.240	42.343	234	-6.	1.7	0.44	0.0				
217	116	116	18.967	18.946	35.994	25.796	34.267	42.372	228	0.	1.7	0.44	0.1				
253	147	146	16.186	16.162	35.565	26.146	34.713	42.910	216	25.	2.9	0.57	4.6				
219	171	171	14.896	14.870	35.373	26.289	34.904	43.146	201	47.	4.0	0.77	8.5				
220	206	205	13.736	13.707	35.236	26.432	35.092	43.375	181	73.	4.9	1.01	12.5				
221	246	244	12.428	12.395	35.095	26.587	35.299	43.631	157	104.	6.4	1.31	17.6				
222	285	284	11.461	11.425	34.998	26.697	35.448	43.818	144	123.	8.1	1.50	21.0				
223	344	342	9.656	9.617	34.794	26.856	35.686	44.128	158	120.	10.7	1.62	23.1				
136	400	398	8.487	8.445	34.674	26.951	35.833	44.325	159	126.	14.4	1.79	25.8				
224	493	490	6.462	6.417	34.495	27.100	36.079	44.661	166	133.	18.7	2.04	30.0				
137	600	597	5.196	5.147	34.428	27.205	36.246	44.887	166	142.	26.5	2.22	32.8				
128	749	744	4.296	4.239	34.449	27.323	36.410	45.093	166	149.	34.5	2.32	34.3				
129	898	891	3.847	3.781	34.510	27.419	36.529	45.233	171	148.	39.1	2.29	33.6				
130	1046	1038	3.699	3.622	34.586	27.495	36.612	45.323	175	145.	40.1	2.20	32.6				
131	1196	1186	3.601	3.512	34.672	27.575	36.696	45.411	180	140.	40.3	2.11	31.0				
132	1394	1382	3.546	3.441	34.790	27.676	36.799	45.516	205	116.	35.0	1.86	27.2				
133	1596	1581	3.438	3.316	34.864	27.747	36.875	45.597	222	99.	31.5	1.70	24.6				
134	1795	1778	3.292	3.154	34.895	27.787	36.923	45.653	232	91.	31.2	1.62	23.4				
135	1993	1973	3.151	2.997	34.906	27.810	36.955	45.692	235	89.	32.7	1.59	22.8				
126	2242	2218	2.959	2.785	34.908	27.831	36.987	45.735	239	87.	35.7	1.56	22.7				
127	2493	2465	2.783	2.588	34.904	27.846	37.012	45.770	238	89.	39.6	1.59	22.8				
138	2745	2712	2.652	2.435	34.898	27.854	37.029	45.795	236	93.	43.5	1.61	23.1				
139	2995	2958	2.538	2.298	34.893	27.862	37.044	45.817	235	95.	47.3	1.62	23.3				
140	3247	3205	2.463	2.199	34.891	27.868	37.056	45.834	233	98.	49.9	1.63	23.6				
141	3503	3456	2.431	2.140	34.891	27.873	37.064	45.845	233	98.	50.7	1.64	23.5				
142	3759	3706	2.400	2.082	34.890	27.877	37.071	45.855	235	97.	51.4	1.64	23.5				
143	4016	3957	2.393	2.046	34.890	27.880	37.076	45.862	235	97.	51.6	1.64	23.3				
144	4322	4256	2.397	2.014	34.887	27.880	37.078	45.865	236	96.	52.0	1.60	23.3				
145	4629	4555	2.408	1.988	34.885	27.881	37.080	45.869	238	94.	52.2	1.60	23.2				
146	4938	4855	2.424	1.965	34.883	27.881	37.082	45.871	238	95.	52.8	1.60	23.3				
147	5245	5153	2.451	1.952	34.883	27.882	37.083	45.874	239	94.	52.6	1.60	23.3				
148	5596	5494	2.495	1.948	34.881	27.880	37.082	45.873	239	94.	52.8	1.61	23.3				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 28 Latitude 19-59.2 S Longitude 1-15.5 E Date 10/20/83 Bottom Depth 5509 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
125	2	1	18.531	18.531	35.747	25.713	34.199	42.320	239	-9.							
217	2	2	18.526	18.526	35.740	25.709	34.195	42.317						340.	2045.	2353.	
253	2	2	18.526	18.526	35.741	25.709	34.196	42.317	240	-10.	1.3	0.41	0.1				2049.
219	24	24	18.512	18.508	35.739	25.712	34.200	42.321	239	-9.	1.4	0.43	0.1	342.	2051.	2359.	
220	65	64	18.531	18.520	35.746	25.715	34.202	42.323	239	-9.	1.4	0.47	0.1				
221	79	79	18.609	18.595	35.800	25.737	34.221	42.339	234	-4.	1.4	0.42	0.1				
222	100	99	17.726	17.709	35.668	25.856	34.371	42.517	226	8.	1.6	0.51	1.4				
223	119	119	15.834	15.815	35.505	26.179	34.760	42.968	213	30.	2.9	0.63	5.2				
224	149	148	14.680	14.658	35.355	26.321	34.945	43.193	204	45.	3.6	0.79	8.2	458.	2084.	2327.	
201	174	173	13.841	13.816	35.247	26.417	35.073	43.352	201	52.	4.1	0.88	10.0				
202	208	207	12.645	12.617	35.107	26.553	35.256	43.579	178	82.	5.6	1.17	15.1	598.	2117.	2309.	
203	248	247	11.748	11.716	35.012	26.653	35.393	43.751	166	99.	7.1	1.36	18.4				
204	288	286	10.715	10.680	34.913	26.766	35.549	43.948	141	130.	9.6	1.62	23.0				
205	347	345	9.636	9.596	34.816	26.877	35.708	44.150	104	174.	13.5	1.97	29.3				
206	399	396	8.741	8.698	34.719	26.946	35.817	44.298	116	167.	14.9	2.02	30.1	1065.	2195.	2295	
207	498	495	6.812	6.765	34.544	27.092	36.054	44.619	136	161.	19.6	2.18	32.6	1121.	2200.	2292.	
209	578	574	5.753	5.703	34.490	27.187	36.200	44.814	127	177.	24.9	2.37	36.0				2216.
208	578	575	5.754	5.704	34.490	27.187	36.200	44.814						1259.	2216.	2293	
210	647	643	5.114	5.061	34.460	27.240	36.286	44.930						1242.	2212.	2290.	
211	647	643	5.110	5.057	34.458	27.239	36.285	44.929	139	170.	28.5	2.39	36.1				2216.
136	754	749	4.513	4.454	34.454	27.304	36.380	45.052	147	167.	33.3	2.40	36.2	1236.	2215.	2294.	
212	897	891	3.880	3.814	34.506	27.412	36.521	45.224	166	152.	38.6	2.30	34.3				
137	1055	1047	3.722	3.644	34.570	27.480	36.596	45.307						1112.	2212.	2307.	
128	1056	1047	3.722	3.644	34.570	27.480	36.596	45.307	173	147.	39.9	2.22	33.1				2211.
129	1206	1197	3.614	3.524	34.663	27.566	36.687	45.402	181	139.	39.7	2.10	31.3				
130	1407	1395	3.542	3.436	34.784	27.672	36.795	45.512	200	121.	35.4	1.89	27.9	946.	2199.	2319.	
131	1606	1592	3.454	3.331	34.860	27.742	36.870	45.591	222	99.	31.0	1.68	24.7				
132	1804	1786	3.308	3.169	34.891	27.782	36.918	45.647	232	91.	30.7	1.60	23.5				
133	2002	1981	3.158	3.003	34.901	27.806	36.950	45.687	239	85.	32.1	1.56	22.8				
135	2249	2225	2.954	2.779	34.904	27.829	36.985	45.733	242	84.	35.0	1.54	22.6				2175.
134	2250	2226	2.953	2.778	34.904	27.829	36.985	45.733						790.	2177.	2325.	
126	2500	2472	2.799	2.603	34.901	27.842	37.008	45.765	242	85.	38.5	1.56	22.7				
127	2755	2722	2.655	2.437	34.897	27.853	37.028	45.793	238	91.	42.8	1.60	23.2				
138	3006	2969	2.539	2.298	34.891	27.860	37.042	45.815	237	93.	46.9	1.61	23.4				
140	3256	3214	2.472	2.206	34.891	27.868	37.055	45.832	238	92.	49.0	1.63	23.6				2199.
139	3257	3215	2.473	2.207	34.890	27.867	37.054	45.831						806.	2202.	2350	
141	3498	3451	2.430	2.140	34.890	27.872	37.064	45.844	237	94.	50.2	1.62	23.6				
142	3751	3698	2.396	2.079	34.888	27.876	37.070	45.854	238	94.	50.9	1.62	23.6				
143	4006	3948	2.390	2.044	34.886	27.877	37.073	45.859	237	95.	51.3	1.61	23.6				
144	4316	4250	2.399	2.017	34.885	27.878	37.076	45.863	239	93.	51.8	1.60	23.5	796.	2203.	2353.	
145	4627	4552	2.420	2.000	34.884	27.879	37.078	45.866	238	94.	52.1	1.60	23.5				
146	4942	4859	2.442	1.982	34.882	27.879	37.079	45.867	239	93.	52.2	1.61	23.4				
147	5251	5160	2.465	1.965	34.881	27.879	37.080	45.870	240	93.	52.5	1.60	23.6				
148	5600	5498	2.498	1.950	34.881	27.880	37.082	45.873	239	94.	52.4	1.60	23.4	788.	2204.	2356.	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 29 Latitude 21- 1.4 S Longitude 1-19.2 E Date 10/20/83 Bottom Depth 4934 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	2	18.957	18.957	35.925	25.741	34.212	42.318	235	-7.				335.	2049.	2364.	
212	3	2	18.936	18.935	35.919	25.741	34.213	42.320	235	-7.	2.1	0.38	0.1				
213	64	63	18.866	18.855	35.918	25.761	34.236	42.344	235	-6.	2.1	0.35	0.1				
214	89	89	18.844	18.828	35.932	25.779	34.254	42.364	235	-6.	2.1	0.35	0.1				
215	114	113	18.060	18.040	35.834	25.902	34.403	42.538	227	5.	2.2	0.41	0.9				
216	138	137	15.763	15.741	35.499	26.192	34.775	42.985	217	26.	3.6	0.57	4.9				
217	176	175	14.542	14.516	35.323	26.327	34.956	43.210	215	35.	3.9	0.67	7.1				
253	223	221	13.232	13.201	35.189	26.499	35.179	43.480	195	62.	5.1	0.98	11.7				
219	267	265	11.841	11.806	35.018	26.641	35.377	43.731	195	69.	6.4	1.10	14.5				
220	307	305	11.215	11.176	34.958	26.711	35.474	43.853	147	121.	9.2	1.49	21.2				
221	347	345	10.136	10.095	34.839	26.810	35.619	44.042	170	105.	10.2	1.48	20.9				
222	407	405	8.950	8.906	34.714	26.910	35.772	44.243	166	116.	13.1	1.65	23.8				
223	457	454	7.430	7.385	34.573	27.028	35.961	44.499	167	125.	16.7	1.85	27.5				
136	527	524	6.172	6.125	34.473	27.120	36.114	44.709	168	133.	21.1	2.03	30.6				
224	596	592	5.310	5.261	34.431	27.194	36.230	44.865	165	143.	26.1	2.17	32.7				
137	714	709	4.455	4.400	34.420	27.282	36.362	45.038	171	143.	33.1	2.18	33.4				
128	854	848	3.897	3.834	34.469	27.381	36.489	45.191	176	142.	39.0	2.18	33.2				
129	1005	998	3.695	3.621	34.563	27.477	36.594	45.306	178	142.	40.7	2.11	32.3				
130	1156	1147	3.663	3.577	34.647	27.548	36.667	45.379	185	135.	39.1	2.00	30.7				
131	1307	1296	3.533	3.435	34.735	27.632	36.757	45.474	198	123.	38.7	1.87	28.5				
132	1508	1495	3.461	3.347	34.824	27.712	36.839	45.560	212	109.	35.2	1.69	26.0				
133	1710	1694	3.330	3.199	34.880	27.771	36.905	45.632	227	95.	32.8	1.56	23.9				
134	1911	1893	3.163	3.016	34.897	27.802	36.945	45.682	238	86.	33.1	1.50	22.9				
135	2113	2091	2.988	2.825	34.904	27.824	36.978	45.724	243	82.	34.7	1.48	22.3				
126	2314	2289	2.813	2.634	34.906	27.843	37.007	45.762	243	84.	38.2	1.49	22.5				
127	2515	2487	2.693	2.497	34.898	27.849	37.020	45.782	242	86.	41.2	1.50	22.7				
138	2718	2686	2.627	2.413	34.893	27.852	37.028	45.795	240	89.	43.6	1.52	22.9				
139	2921	2885	2.546	2.313	34.891	27.859	37.040	45.812	238	92.	46.5	1.54	23.2				
140	3124	3084	2.474	2.222	34.889	27.865	37.051	45.828	236	94.	49.3	1.56	23.4				
141	3328	3284	2.443	2.170	34.888	27.868	37.057	45.837	234	97.	50.5	1.57	23.5				
142	3531	3482	2.422	2.128	34.890	27.873	37.065	45.846			51.4	1.59	23.6				
143	3732	3680	2.399	2.084	34.890	27.877	37.071	45.854	234	98.	52.1	1.58	23.5				
144	3936	3878	2.388	2.050	34.889	27.879	37.075	45.860	234	98.	52.2	1.59	23.4				
145	4190	4127	2.390	2.023	34.887	27.879	37.077	45.864	235	97.	52.7	1.57	23.5				
146	4447	4377	2.404	2.006	34.885	27.879	37.078	45.865	236	96.	52.9	1.58	23.5				
147	4701	4624	2.417	1.988	34.885	27.881	37.080	45.869	237	95.	53.0	1.58	23.4				
148	5005	4920	2.443	1.975	34.883	27.880	37.080	45.869	238	94.	53.2	1.59	23.4				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 30 Latitude 21-58.6 S Longitude 1-23.6 E Date 10/21/83 Bottom Depth 5163 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	1	18.417	18.417	35.722	25.722	34.213	42.337	241	-10							
212	3	3	18.417	18.416	35.722	25.722	34.213	42.337	240	-9.	1.8	0.46	0.2	340.	2051.	2361	
213	24	24	18.404	18.400	35.721	25.726	34.217	42.342	240	-9.	1.8	0.46	0.2	339.	2050.	2360.	
214	49	49	18.059	18.051	35.758	25.841	34.343	42.478	239	-7.	2.1	0.37	0.1				
215	89	88	18.003	17.988	35.767	25.864	34.368	42.504	236	-3.	2.0	0.40	0.1				
216	118	118	17.535	17.515	35.709	25.935	34.455	42.607	231	4.	2.2	0.40	0.5	354.	2056.	2356	
217	148	147	16.225	16.201	35.536	26.115	34.681	42.876	219	22.	3.2	0.57	4.0	393.	2064.	2339	
253	179	178	14.979	14.952	35.388	26.283	34.895	43.133	219	28.	3.5	0.64	5.8				
219	217	216	13.587	13.556	35.195	26.431	35.098	43.386	197	58.	5.0	0.96	10.9	516.	2102.	2322.	
220	258	256	12.363	12.329	35.066	26.578	35.293	43.627	204	57.	5.6	1.03	12.4	536.	2109.	2321	
221	307	305	11.196	11.158	34.944	26.704	35.467	43.847	184	84.	7.7	1.29	17.0				
222	359	357	9.792	9.751	34.797	26.836	35.660	44.097	182	95.	10.2	1.49	20.3	715.	2151.	2313	
223	408	406	8.628	8.584	34.677	26.931	35.808	44.294	173	111.	13.5	1.71	24.0	815.	2167.	2307	
136	489	486	7.127	7.080	34.545	27.049	35.996	44.548	166	128.	18.2	2.00	29.4				
224	597	593	5.063	5.015	34.361	27.167	36.216	44.864	203	107.	23.1	2.04	29.8	932.	2190.	2310	
137	747	742	4.440	4.382	34.429	27.292	36.372	45.048	154	160.	33.7	2.36	35.1				
128	946	939	3.734	3.665	34.498	27.421	36.537	45.247	177	143.	40.8	2.24	33.0				
129	1146	1137	3.639	3.554	34.613	27.524	36.644	45.357	180	140.	40.6	2.14	31.6				
130	1346	1335	3.541	3.440	34.721	27.621	36.745	45.463	196	125.	38.6	1.96	28.6				
131	1548	1534	3.454	3.336	34.817	27.708	36.835	45.557	211	110.	35.1	1.79	26.2				
132	1749	1733	3.299	3.165	34.868	27.764	36.901	45.630	227	96.	33.4	1.64	23.9				
133	1952	1933	3.116	2.966	34.885	27.797	36.943	45.682	238	86.	34.1	1.57	22.9				
134	2155	2132	2.948	2.782	34.891	27.818	36.974	45.722	242	84.	35.9	1.54	22.5				
135	2385	2359	2.715	2.532	34.877	27.829	36.999	45.760	241	87.	41.9	1.58	23.1				
126	2613	2583	2.562	2.360	34.873	27.840	37.020	45.790	241	88.	45.7	1.60	23.4				
127	2818	2784	2.484	2.263	34.874	27.849	37.034	45.809	242	88.	47.3	1.60	23.4				
138	3022	2984	2.433	2.193	34.874	27.855	37.044	45.822	241	90.	49.0	1.61	23.4				
139	3226	3184	2.409	2.148	34.880	27.864	37.054	45.835	237	94.	48.4	1.60	23.3				
140	3429	3383	2.395	2.113	34.883	27.869	37.062	45.844	236	95.	51.1	1.61	23.5				
141	3633	3582	2.385	2.081	34.885	27.873	37.068	45.851	235	97.	51.7	1.62	23.5				
142	3836	3780	2.381	2.055	34.886	27.876	37.072	45.857	235	97.	52.1	1.61	23.5				
143	4038	3978	2.381	2.032	34.885	27.877	37.074	45.860	235	97.	52.3	1.62	23.5				
144	4293	4227	2.389	2.010	34.885	27.879	37.077	45.865	236	96.	52.8	1.61	23.4				
145	4553	4480	2.402	1.991	34.882	27.878	37.078	45.866	236	96.	52.9	1.62	23.5				
146	4809	4730	2.419	1.977	34.881	27.878	37.079	45.868	237	95.	53.1	1.61	23.4				
147	5066	4979	2.445	1.969	34.881	27.879	37.079	45.869	237	96.	53.4	1.62	23.4				
148	5261	5169	2.468	1.966	34.880	27.878	37.079	45.869	237	96.	53.3	1.62	23.4				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 31 Latitude 22-59.5 S Longitude 1-26.3 E Date 10/21/83 Bottom Depth 4950 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	2	18.408	18.408	35.751	25.747	34.237	42.362	242	-11.							
213	2	2	18.387	18.387	35.749	25.750	34.242	42.367	242	-11.	1.5	0.36	0.1				
214	23	23	18.310	18.306	35.747	25.769	34.263	42.391	244	-13.	1.5	0.36	0.1				
215	73	72	18.069	18.056	35.756	25.838	34.340	42.475	242	-10.	1.6	0.34	0.1				
216	97	97	18.011	17.994	35.760	25.857	34.361	42.497	237	-4.	1.6	0.36	0.1				
217	122	121	17.654	17.633	35.727	25.920	34.436	42.584	234	0.	1.8	0.36	0.2				
253	148	147	16.838	16.814	35.615	26.032	34.576	42.751	225	13.	2.4	0.47	2.5				
219	187	186	15.021	14.993	35.394	26.278	34.889	43.126	219	28.	3.3	0.63	5.9				
220	231	230	13.545	13.512	35.199	26.443	35.111	43.401	182	73.	5.3	1.06	13.2				
221	271	269	12.576	12.539	35.091	26.556	35.262	43.589	205	55.	5.3	1.01	12.2				
222	355	353	10.693	10.650	34.892	26.755	35.540	43.940	190	81.	8.3	1.36	18.0				
223	454	452	8.533	8.485	34.679	26.948	35.829	44.319	157	128.	14.1	1.83	26.1				
136	561	558	6.608	6.556	34.509	27.092	36.065	44.640	157	141.	19.6	2.09	30.8				
224	644	639	5.375	5.321	34.430	27.186	36.219	44.851	167	140.	24.7	2.18	32.7				
137	717	712	4.927	4.869	34.428	27.237	36.292	44.946	162	149.	28.5	2.29	33.7				
128	850	844	4.194	4.129	34.448	27.334	36.427	45.115	169	147.	35.6	2.31	33.9				
129	998	991	3.863	3.789	34.513	27.420	36.530	45.234	172	147.	38.9	2.30	33.7				
130	1144	1134	3.588	3.504	34.583	27.505	36.628	45.344	181	140.	41.8	2.19	31.9				
131	1292	1281	3.510	3.414	34.665	27.579	36.705	45.425	188	133.	41.4	2.08	30.3				
132	1491	1478	3.422	3.310	34.765	27.668	36.799	45.522	202	120.	39.1	1.91	27.9				
133	1690	1674	3.382	3.252	34.838	27.732	36.864	45.590	218	104.	34.6	1.73	25.2				
134	1893	1874	3.221	3.075	34.877	27.780	36.921	45.655	230	93.	34.2	1.62	23.7				
135	2090	2068	3.076	2.914	34.892	27.807	36.956	45.698	238	87.	34.8	1.58	23.0				
126	2289	2264	2.858	2.681	34.885	27.822	36.984	45.737	240	87.	39.1	1.59	23.0				
127	2486	2458	2.699	2.506	34.879	27.833	37.004	45.766	241	87.	42.8	1.62	23.3				
138	2685	2653	2.568	2.358	34.874	27.841	37.021	45.791	240	89.	46.1	1.62	23.4				
139	2887	2852	2.484	2.256	34.874	27.850	37.035	45.810	240	90.	48.1	1.63	23.5				
140	3091	3051	2.428	2.181	34.877	27.859	37.048	45.826	240	91.	49.7	1.63	23.5				
141	3294	3250	2.399	2.131	34.881	27.866	37.058	45.839	239	92.	50.7	1.63	23.5				
142	3496	3449	2.388	2.099	34.889	27.875	37.068	45.851	235	96.	51.2	1.63	23.5				
143	3749	3695	2.374	2.058	34.889	27.878	37.074	45.859	235	97.	52.1	1.63	23.5				
144	4004	3945	2.373	2.028	34.889	27.881	37.078	45.864			52.5	1.63	23.5				
145	4261	4195	2.382	2.007	34.887	27.881	37.079	45.867	237	95.	52.9	1.62	23.4				
146	4516	4444	2.397	1.991	34.887	27.882	37.081	45.870	235	97.	53.4	1.62	23.4				
147	4719	4642	2.412	1.981	34.885	27.881	37.081	45.870	236	96.	53.4	1.62	23.4				
148	5022	4937	2.442	1.972	34.885	27.882	37.082	45.872	236	96.	53.6	1.62	23.4				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 32 Latitude 23-59.4 S Longitude 1-30.1 E Date 10/22/83 Bottom Depth 5077 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	1	1	18.467	18.467	35.842	25.802	34.289	42.411	238	-8.							
210	2	2	18.470	18.470	35.843	25.802	34.289	42.410	237	-7	1.2	0.28	0 0				
211	73	72	18.463	18.450	35.843	25.807	34.295	42.417	237	-7.	1.1	0.27	0.0				
212	108	107	17.955	17.936	35.774	25.882	34.387	42.526	231	2.	1.7	0.25	0.3				
213	138	137	16.461	16.439	35.569	26.085	34.642	42.830	218	22.	2.2	0.42	3.8				
214	167	166	15.251	15.225	35.400	26.231	34.834	43.063	215	31.	3.0	0.52	6.0				
215	197	196	14.466	14.437	35.303	26.329	34.961	43.218	210	40.	3.4	0.63	7.8				
216	236	235	13.433	13.400	35.173	26 446	35.119	43.413	206	50.	3.7	0.74	9.8				
217	277	275	12.547	12.510	35.088	26.559	35.267	43.594	204	56.	4.7	0.86	12.0				
253	316	314	11.695	11.654	35.007	26.661	35.403	43.763	195	70.	5.9	1.03	14.8				
219	357	355	10.747	10.703	34.899	26.750	35.533	43.931	183	88.	7.5	1.21	18.1				
220	406	404	9.901	9.854	34.804	26.824	35.644	44.076	175	101.	9.9	1.40	20.9				
221	457	454	9 038	8.988	34 718	26.900	35.758	44.227	165	117.	12.3	1.59	24.0				
222	516	513	7.630	7.578	34.579	27.005	35.929	44.458	172	119.	15.3	1.76	26.6				
223	576	573	6.333	6.281	34.456	27.087	36.073	44.661	192	108.	17.8	1.84	28.0				
136	652	647	5.329	5.275	34.387	27.157	36.193	44.829	193	115.	22.0	1.99	30.2				
224	715	711	4.607	4.551	34.363	27.221	36.293	44.963	193	120	27 6	2.09	31 7				
137	801	796	4.144	4.084	34.393	27.295	36.391	45.082	179	138.	34.5	2.22	33.1				
128	902	895	3.813	3.747	34.442	27.368	36.481	45.188	176	143.	39.9	2.25	33.5				
129	1052	1044	3.581	3.504	34.541	27.471	36.595	45.312	175	146.	43.4	2.19	32.9				
130	1204	1195	3.479	3.391	34.628	27.552	36.680	45.401	181	140.	43.5	2.10	31.3				
131	1356	1344	3.470	3.369	34.722	27.629	36.756	45.478	194	127.	39.7	1.95	29.0				
132	1508	1494	3 374	3.261	34.784	27.688	36.821	45.547	207	115.	37.7	1.80	27.0				
133	1709	1692	3 265	3.135	34.842	27.746	36.885	45.616	222	101.	35.4	1.65	24.7				
134	1912	1893	3.122	2.976	34.870	27.784	36.930	45.669	232	92.	35.1	1.56	23.6				
135	2114	2092	2.958	2.796	34.879	27.807	36.963	45.711	237	89.	36.9	1.53	23.1				
126	2316	2291	2.774	2.596	34.875	27.822	36.988	45.746	238	89.	40.9	1.55	23.2				
127	2518	2489	2.596	2.402	34.869	27.834	37.011	45.778	240	89.	44.9	1.56	23.3				
138	2720	2687	2.517	2.305	34.871	27.843	37.026	45.798	241	89.	46.4	1.56	23.3				
139	2923	2886	2.461	2.230	34.872	27.851	37.037	45.813	241	89.	47.7	1.56	23.3				
140	3119	3078	2.421	2 171	34.877	27.859	37.049	45.828	240	91.	48.9	1.56	23.3				
141	3319	3275	2.402	2 132	34.880	27.865	37.057	45.838	238	93.	49.9	1.57	23.3				
142	3520	3471	2.388	2.096	34.883	27.870	37.064	45.847	235	96.	50.9	1.57	23.4				
143	3719	3667	2.381	2.068	34.885	27.874	37.069	45.854	236	96.	51.3	1.57	23.5				
144	3917	3860	2.374	2.039	34.885	27.877	37.073	45.859	235	97.	51.7	1.56	23 5				
145	4175	4111	2.383	2.018	34.885	27.878	37.076	45.863	234	98	52 1	1 56	23.4				
146	4431	4361	2.399	2.003	34.884	27.879	37.077	45.865	235	97.	52.5	1.56	23.5				
147	4785	4705	2 431	1.991	34.883	27.879	37.078	45.867	235	97.	52.6	1.56	23.4				
148	5156	5066	2.471	1.983	34.882	27.879	37.079	45.867	234	98.	52.7	1.57	23.5				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 33 Latitude 25- 0.0 S Longitude 1-33.5 E Date 10/22/83 Bottom Depth 4476 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
											uM/KG			uatm	uM/kg	uEq/kg	uM/kg
125	2	2	18.570	18.570	35.900	25.820	34.303	42.421	237	-7.							
212	3	3	18.548	18.547	35.902	25.827	34.312	42.430	237	-7.	1.6	0.29	0.0	334.	2042.	2356.	
213	18	18	18.526	18.523	35.898	25.830	34.315	42.434	238	-8.	1.4	0.29	0.0	334.	2038.	2351	
214	31	31	18.465	18.460	35.894	25.843	34.330	42.451	238	-8.	1.4	0.29	0.0				
215	61	61	18.218	18.207	35.864	25.884	34.379	42.508	239	-8.	1.5	0.29	0.0				
216	90	90	17.989	17.973	35.847	25.929	34.432	42.568	238	-5.	1.7	0.27	0.1				
217	111	110	17.831	17.812	35.826	25.953	34.461	42.603	239	-6.	1.9	0.27	0.1	338.	2040.	2350	
253	141	140	17.402	17.378	35.756	26.005	34.529	42.684	233	2.	2.1	0.32	0.7				
219	160	159	16.052	16.027	35.529	26.149	34.722	42.923	220	22.	2.8	0.50	4.1				
220	200	199	14.786	14.756	35.353	26.298	34.918	43.164	218	30.	3.5	0.63	6.3	433.	2065.	2317	
221	269	268	12.891	12.854	35.120	26.516	35.210	43.525	209	50.	4.7	0.88	10.7				
222	340	338	11.340	11.297	34.963	26.693	35.450	43.825	195	72.	8.0	1.17	15.5				
223	440	437	9.419	9.369	34.756	26.867	35.709	44.161	218	61.	10.9	1.52	21.0				
136	544	540	7.383	7.330	34.561	27.027	35.962	44.503	167	126.	17.2	1.94	27.7	918.	2164.	2284.	
224	619	615	5.829	5.775	34.429	27.130	36.141	44.752	185	119.	20.9	2.06	29.8				
137	705	700	4.882	4.826	34.374	27.199	36.258	44.914	191	120.	25.7	2.17	31.3	990.	2175.	2284.	
128	805	799	4.374	4.312	34.404	27.279	36.364	45.044	168	147.	33.2	2.36	34.1	1131.	2204.	2295	
129	906	899	3.832	3.765	34.417	27.346	36.458	45.165	180	139.	40.0	2.35	33.6				
130	1007	999	3.511	3.439	34.482	27.430	36.558	45.280	179	142.	45.5	2.35	33.3				
131	1108	1099	3.388	3.308	34.545	27.493	36.627	45.354	180	142.	47.4	2.29	32.7				
132	1259	1248	3.368	3.276	34.647	27.578	36.711	45.439	186	136.	45.4	2.15	30.9	1028.	2205.	2312.	
133	1409	1397	3.347	3.243	34.747	27.661	36.795	45.522	200	122.	41.2	1.97	28.3				
134	1611	1596	3.250	3.129	34.817	27.727	36.866	45.598	214	109.	38.4	1.81	26.0				
135	1813	1795	3.151	3.013	34.854	27.767	36.912	45.649	226	98.	37.0	1.72	24.5				
126	2014	1993	2.955	2.802	34.872	27.801	36.957	45.704	234	92.	38.6	1.65	23.7	813.	2177.	2320.	
127	2216	2192	2.762	2.594	34.870	27.818	36.985	45.742	235	92.	42.4	1.66	23.7				
138	2418	2391	2.589	2.405	34.869	27.833	37.010	45.778	239	90.	45.4	1.65	23.6	805.	2185.	2331	
139	2622	2591	2.510	2.308	34.871	27.843	37.026	45.798	240	90.	46.8	1.64	23.5				
140	2824	2789	2.428	2.208	34.874	27.854	37.042	45.819	241	90.	48.7	1.64	23.5				
141	3027	2988	2.411	2.171	34.878	27.860	37.050	45.829									
142	3230	3187	2.394	2.133	34.880	27.865	37.057	45.838	238	93.	50.4	1.63	23.5				
143	3433	3386	2.361	2.079	34.883	27.872	37.066	45.850	237	95.	51.4	1.64	23.5				
144	3636	3585	2.362	2.058	34.886	27.876	37.071	45.856	236	96.	51.7	1.63	23.5				
145	3841	3784	2.362	2.036	34.887	27.878	37.075	45.861	235	97.	52.2	1.64	23.5	790.	2199.	2350	
146	4043	3982	2.367	2.018	34.886	27.879	37.077	45.864	235	97.	52.7	1.63	23.5				
147	4309	4242	2.387	2.006	34.886	27.880	37.078	45.866	235	97.	52.6	1.62	23.5				
148	4562	4488	2.409	1.997	34.885	27.880	37.079	45.867	235	97.	52.7	1.61	23.5	784.	2209.	2363	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 34 Latitude 25-59.5 S Longitude 1-37.6 E Date 10/23/83 Bottom Depth 4856 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	1	18.017	18.017	35.801	25.883	34.385	42.521	240	-8							
212	2	2	18.001	18.001	35.803	25.888	34.391	42.527	242	-10.	2.1	0.30	0.1				
213	44	44	17.249	17.242	35.628	25.939	34.469	42.631	244	-8.	2.0	0.28	0.0				
214	89	89	17.172	17.157	35.672	25.994	34.526	42.689	240	-4.	2.2	0.31	0.3				
215	119	119	16.410	16.391	35.566	26.093	34.653	42.842	230	10.	2.7	0.40	2.3				
216	148	147	14.962	14.940	35.366	26.268	34.881	43.120	211	36.	3.6	0.65	6.5				
217	178	177	14.328	14.302	35.287	26.346	34.983	43.245	211	40.	3.9	0.73	7.7				
253	208	207	13.324	13.295	35.159	26.457	35.134	43.432	210	46.	4.3	0.86	9.4				
219	247	246	12.541	12.508	35.079	26.552	35.260	43.588	209	51.	5.1	0.96	11.5				
220	288	287	11.690	11.653	34.996	26.652	35.395	43.755	197	68.	6.5	1.17	14.7				
221	338	336	10.828	10.787	34.902	26.738	35.517	43.912	193	77.	7.8	1.31	16.9				
222	394	392	9.803	9.757	34.791	26.830	35.654	44.091	187	90.	9.8	1.49	19.8				
223	474	471	8.391	8.341	34.650	26.948	35.836	44.332	173	113.	14.4	1.77	24.7				
136	541	538	6.884	6.833	34.517	27.062	36.020	44.583	172	124.	18.4	2.01	28.6				
224	593	589	5.909	5.857	34.419	27.112	36.119	44.727	197	106.	19.8	2.04	28.6				
137	685	681	4.741	4.687	34.358	27.202	36.268	44.931	197	115.	26.4	2.18	31.1				
128	775	769	4.097	4.039	34.361	27.274	36.373	45.067	196	121.	33.2	2.29	32.2				
129	862	856	3.719	3.657	34.406	27.348	36.466	45.179	187	133.	40.6	2.37	33.3				
130	955	947	3.546	3.477	34.457	27.407	36.533	45.253	180	141.	44.5	2.39	33.5				
131	1051	1043	3.419	3.344	34.520	27.470	36.602	45.328	180	142.	47.1	2.35	33.0				
132	1188	1178	3.382	3.296	34.612	27.548	36.681	45.408	185	137.	45.7	2.23	31.6				
133	1383	1371	3.371	3.269	34.726	27.641	36.774	45.501	197	125.	41.8	2.05	28.9				
134	1580	1566	3.215	3.097	34.791	27.709	36.851	45.584	211	112.	40.9	1.91	26.9				
135	1770	1753	3.157	3.023	34.846	27.760	36.904	45.641	226	98.	37.5	1.76	24.8				
126	1964	1943	2.958	2.810	34.860	27.791	36.946	45.693	232	94.	39.5	1.71	24.1				
127	2202	2178	2.700	2.534	34.853	27.810	36.980	45.741	233	95.	45.2	1.71	24.3				
138	2453	2425	2.522	2.336	34.857	27.830	37.011	45.782	236	93.	48.6	1.71	24.1				
139	2704	2671	2.468	2.259	34.867	27.844	37.029	45.804	240	90.	48.4	1.68	23.7				
140	2955	2918	2.394	2.161	34.871	27.855	37.046	45.825	239	92.	50.2	1.68	23.7				
141	3208	3165	2.349	2.091	34.875	27.864	37.058	45.842	237	94.	51.7	1.68	23.7				
142	3461	3413	2.340	2.056	34.880	27.871	37.067	45.852	236	96.	52.3	1.67	23.7				
143	3720	3666	2.344	2.032	34.884	27.876	37.073	45.860	235	97.	52.6	1.66	23.7				
144	3976	3917	2.356	2.015	34.884	27.878	37.076	45.863	235	97.	52.9	1.65	23.7				
145	4230	4164	2.379	2.008	34.884	27.878	37.077	45.864	235	97.	52.6	1.65	23.7				
146	4483	4410	2.405	2.003	34.883	27.878	37.077	45.864	235	97.	52.6	1.65	23.7				
147	4689	4611	2.429	2.001	34.883	27.878	37.077	45.865	235	97.	52.5	1.64	23.6				
148	4933	4848	2.455	1.996	34.885	27.880	37.079	45.867	235	97.	52.6	1.64	23.6				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 35 Latitude 26-59.5 S Longitude 1-39.8 E Date 10/23/83 Bottom Depth 4676 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
125	2	2	18.149	18.149	35.608	25.702	34.203	42.336	244	-12.							
212	3	2	18.156	18.155	35.613	25.704	34.204	42.338	244	-12.	1.5	0.24	0.0	338.	2044.	2353	
213	26	26	17.881	17.877	35.592	25.757	34.267	42.409	246	-13.	1.5	0.23	0.0	337.	2042.	2351.	
214	50	50	17.169	17.161	35.562	25.908	34.442	42.606	249	-12.	1.7	0.23	0.0				
215	91	91	17.083	17.068	35.560	25.929	34.466	42.633	240	-3.	1.5	0.24	0.2				
216	120	120	15.313	15.295	35.339	26.169	34.770	42.997	210	36.	2.9	0.66	6.7				
217	149	148	13.586	13.565	35.133	26.381	35.048	43.337	203	52.	3.9	0.88	10.5				
253	176	175	12.743	12.719	35.063	26.499	35.198	43.519	198	61.	5.0	1.01	12.5				
219	216	215	12.019	11.991	35.018	26.605	35.334	43.682	195	68.	5.9	1.09	14.3				
220	257	256	11.351	11.319	34.955	26.683	35.440	43.813			6.5	1.20	15.7				
221	307	305	10.506	10.469	34.862	26.763	35.556	43.964	185	87.	8.3	1.37	18.5				
222	359	357	9.344	9.304	34.740	26.866	35.710	44.165	187	93.	10.5	1.54	21.0				
223	419	416	8.275	8.231	34.632	26.950	35.843	44.344	183	104.	13.4	1.73	23.9				
136	481	478	6.877	6.832	34.503	27.051	36.010	44.573	179	117.	17.8	1.96	27.9				
224	558	554	5.538	5.491	34.386	27.131	36.156	44.781									
137	642	638	4.678	4.628	34.336	27.191	36.260	44.926	211	102.	24.7	2.11	29.9				
128	722	717	4.121	4.067	34.345	27.258	36.356	45.049	203	114.	32.2	2.24	31.5				
129	801	795	3.828	3.770	34.369	27.308	36.420	45.127	196	123.	37.6	2.31	32.4				
130	901	894	3.524	3.460	34.415	27.375	36.503	45.225	188	133.	44.6	2.37	33.0				
131	997	989	3.356	3.266	34.476	27.440	36.577	45.306	182	141.	48.0	2.37	33.1				
132	1092	1083	3.197	3.120	34.546	27.512	36.656	45.392	182	142.	51.8	2.33	32.6				
133	1242	1231	3.107	3.019	34.659	27.611	36.759	45.498	191	133.	50.8	2.19	30.7				
134	1395	1382	3.142	3.041	34.738	27.672	36.817	45.555	200	124.	45.8	2.03	28.5				
135	1600	1585	3.093	2.975	34.807	27.733	36.881	45.620	216	108.	41.4	1.85	26.1				
126	1802	1784	2.929	2.795	34.834	27.771	36.928	45.676	224	102.	42.6	1.77	25.1				
127	2004	1983	2.721	2.573	34.839	27.795	36.964	45.723	228	100.	46.6	1.77	24.9				
138	2257	2232	2.550	2.381	34.846	27.817	36.996	45.765	231	98.	49.3	1.74	24.6				
139	2510	2481	2.454	2.264	34.854	27.833	37.018	45.793	236	94.	50.1	1.71	24.1				
140	2762	2728	2.405	2.191	34.865	27.848	37.037	45.815	239	92.	50.3	1.67	23.7				
141	3018	2979	2.358	2.120	34.871	27.859	37.051	45.833	238	93.	51.2	1.66	23.6				
142	3278	3234	2.335	2.070	34.876	27.867	37.062	45.846	236	96.	52.0	1.64	23.5				
143	3529	3480	2.329	2.038	34.878	27.871	37.068	45.854	235	97.	52.8	1.64	23.5				
144	3785	3730	2.340	2.021	34.880	27.874	37.072	45.859	234	98.	53.1	1.64	23.6				
145	4042	3980	2.363	2.014	34.881	27.875	37.074	45.861	234	98.	52.7	1.63	23.6				
146	4297	4229	2.389	2.009	34.882	27.876	37.075	45.862	234	98.	53.1	1.64	23.7				
147	4553	4478	2.415	2.004	34.882	27.877	37.076	45.863	237	95.	53.1	1.63	23.6				
148	4741	4662	2.433	1.998	34.882	27.877	37.077	45.864	236	96.	53.0	1.63	23.6				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 36 Latitude 27-59.3 S Longitude 1-43.6 E Date 10/23/83 Bottom Depth 4411 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	1	17.777	17.777	35.626	25.808	34.320	42.465	244	-10							
212	2	2	17.769	17.769	35.625	25.809	34.322	42.467	245	-11.	2.0	0.27	0.0				
213	28	28	17.778	17.773	35.626	25.809	34.321	42.466	245	-11.	2.0	0.27	0.0				
214	72	72	16.363	16.351	35.568	26.104	34.665	42.855	250	-10.	2.2	0.27	0.4				
215	102	102	16.470	16.453	35.651	26.144	34.701	42.886	242	-2.	2.1	0.28	0.2				
216	132	131	15.492	15.472	35.435	26.203	34.797	43.017	232	13.	2.9	0.44	3.5				
217	166	165	14.486	14.461	35.292	26.315	34.947	43.203	216	34.	3.5	0.64	6.8				
253	202	201	13.183	13.155	35.123	26.458	35.140	43.444	197	60.	4.6	0.94	11.8				
219	222	220	12.747	12.717	35.081	26.513	35.213	43.533									
220	282	280	11.598	11.562	34.978	26.656	35.402	43.766	183	83.	7.0	1.19	16.3				
221	342	339	10.761	10.719	34.904	26.752	35.534	43.931	183	88.	8.1	1.29	17.8				
222	377	375	9.847	9.803	34.793	26.824	35.646	44.081	186	90.	9.6	1.38	19.7				
223	452	449	8.484	8.436	34.662	26.942	35.826	44.318	165	120.	14.4	1.72	25.0				
136	533	529	7.263	7.211	34.541	27.028	35.969	44.515	184	110.	16.8	1.80	26.5				
224	620	616	5.383	5.331	34.382	27.147	36.180	44.813	202	105.	21.7	1.99	29.2				
137	679	674	5.092	5.037	34.374	27.175	36.223	44.870	196	113.	23.9	2.05	30.5				
128	779	773	4.407	4.347	34.371	27.249	36.332	45.011	188	127.	30.8	2.20	32.6				
129	880	873	3.825	3.761	34.386	27.322	36.435	45.142	190	129.	38.3	2.25	33.0				
130	980	972	3.427	3.357	34.434	27.400	36.533	45.259	187	135.	46.7	2.28	33.2				
131	1056	1047	3.265	3.191	34.482	27.454	36.595	45.329	185	138.	50.5	2.28	33.2				
132	1106	1097	3.163	3.086	34.509	27.485	36.632	45.370	183	141.	53.4	2.30	33.2				
133	1156	1147	3.094	3.013	34.540	27.517	36.666	45.408	183	142.	54.7	2.27	32.7				
134	1207	1197	3.112	3.027	34.581	27.548	36.696	45.437	183	141.	53.5	2.22	32.2				
135	1408	1395	3.155	3.053	34.700	27.641	36.786	45.523	193	131.	48.4	2.09	30.1				
126	1610	1595	3.079	2.960	34.772	27.707	36.856	45.596	206	119.	46.0	1.94	28.0				
127	1811	1793	3.018	2.883	34.822	27.754	36.906	45.650	218	107.	43.6	1.81	26.1				
138	2013	1992	2.870	2.719	34.842	27.785	36.945	45.697	226	100.	44.1	1.75	25.1				
139	2266	2241	2.672	2.501	34.848	27.808	36.981	45.743	230	98.	47.5	1.70	24.9				
140	2519	2489	2.508	2.316	34.853	27.828	37.010	45.783	234	96.	50.2	1.69	24.6				
141	2769	2735	2.406	2.191	34.860	27.844	37.033	45.811	236	95.	51.8	1.68	24.4				
142	3019	2980	2.358	2.120	34.869	27.857	37.050	45.832	238	93.	51.9	1.64	24.0				
143	3267	3223	2.329	2.066	34.875	27.866	37.062	45.846	236	96.	52.7	1.63	23.9				
144	3521	3471	2.325	2.035	34.880	27.873	37.070	45.856	236	96.	53.1	1.63	23.9				
145	3770	3714	2.337	2.019	34.881	27.875	37.073	45.860	235	97.	52.9	1.64	23.9				
146	4028	3967	2.360	2.013	34.883	27.877	37.075	45.862	235	97.	53.2	1.64	23.9				
147	4233	4167	2.382	2.010	34.884	27.878	37.076	45.864	234	98.	53.0	1.60	23.8				
148	4451	4379	2.407	2.009	34.884	27.878	37.077	45.864	235	97.	53.0	1.62	23.7				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 37 Latitude 28-59.9 S Longitude 1-47.1 E Date 10/24/83 Bottom Depth 3625 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
											uM/KG			uatm	uM/kg	uEq/kg	uM/kg
125	2	2	17.491	17.491	35.606	25.862	34.385	42.538	249	-14							
212	3	3	17.561	17.560	35.610	25.848	34.368	42.520	250	-15.	2.1	0.21	0.1	335.	2034.	2343.	2035
213	26	26	16.855	16.851	35.602	26.013	34.557	42.730	253	-15.	1.8	0.21	0.1	338.	2032.	2338.	
214	50	50	16.246	16.238	35.556	26.121	34.686	42.880	245	-4.	2.5	0.28	1.0				
215	75	74	16.076	16.064	35.557	26.162	34.733	42.933	244	-2.	2.4	0.30	1.1				
216	100	99	16.097	16.081	35.598	26.190	34.760	42.958	244	-2.	2.2	0.30	0.9				
217	125	124	16.234	16.214	35.652	26.201	34.765	42.959									
253	150	149	15.420	15.397	35.444	26.227	34.823	43.046	231	14.	2.7	0.44	3.6				
219	180	179	14.546	14.519	35.336	26.337	34.965	43.219	220	30.	2.9	0.59	6.0				
220	225	223	13.101	13.070	35.141	26.489	35.174	43.481	214	43.	4.1	0.79	9.5	488.	2081.	2308	
221	269	268	12.420	12.384	35.077	26.575	35.288	43.620	211	50.	5.0	0.93	11.5				
222	320	318	11.498	11.457	34.986	26.681	35.432	43.800	214	52.	5.5	1.02	13.1	543.	2097.	2304	
223	380	378	10.460	10.414	34.857	26.769	35.564	43.974	213	60.	6.7	1.19	15.6				
136	441	438	9.744	9.693	34.774	26.828	35.655	44.094	202	75.	9.3	1.37	18.5				
224	499	496	8.211	8.159	34.626	26.957	35.853	44.357	187	100.	14.4	1.70	23.7				
137	571	567	7.351	7.295	34.540	27.015	35.953	44.495	189	104.	15.8	1.83	25.7	833.	2154.	2288	
128	641	637	5.949	5.893	34.410	27.100	36.105	44.712	207	96.	18.9	1.96	27.5				
129	702	697	4.925	4.869	34.337	27.165	36.222	44.877	220	91.	22.0	2.05	28.7	883.	2166.	2292	
130	762	756	4.316	4.258	34.309	27.210	36.298	44.982	221	94.	26.9	2.10	29.8	912.	2172.	2293.	2173
131	822	816	3.934	3.874	34.327	27.264	36.372	45.074	212	106.	32.8	2.22	31.2	964.	2183.	2297	
132	902	895	3.635	3.570	34.360	27.320	36.443	45.161	203	118.	39.3	2.29	32.3				
133	1001	993	3.353	3.283	34.395	27.376	36.514	45.244	195	128.	45.8	2.37	32.8				
134	1101	1091	3.077	3.001	34.460	27.454	36.606	45.349	189	136.	53.0	2.40	33.2				
135	1200	1190	3.050	2.966	34.557	27.535	36.686	45.431	184	141.	55.1	2.33	32.6				
126	1300	1289	3.009	2.917	34.617	27.587	36.740	45.486	189	136.	54.8	2.25	31.6	1055.	2219.	2324	
127	1401	1389	3.016	2.916	34.680	27.637	36.790	45.535	192	133.	52.4	2.13	30.1				
138	1552	1537	3.037	2.924	34.749	27.692	36.843	45.586	203	122.	48.2	1.99	28.1				
139	1704	1688	2.996	2.870	34.795	27.733	36.886	45.632	212	113.	45.6	1.87	26.7				
140	1900	1881	2.787	2.647	34.807	27.763	36.928	45.684	218	109.	49.5	1.83	26.2				
141	2096	2073	2.670	2.514	34.826	27.790	36.961	45.724	225	103.	49.8	1.76	25.5	865.	2199.	2334.	2197
142	2295	2269	2.542	2.370	34.838	27.812	36.991	45.761	229	100.	51.2	1.72	24.9				
143	2497	2468	2.446	2.257	34.846	27.827	37.013	45.788	232	98.	52.4	1.66	24.6				
144	2749	2715	2.383	2.171	34.854	27.841	37.031	45.811	236	95.	52.6	1.65	24.2	821.	2197.	2341	
145	3003	2964	2.306	2.070	34.865	27.858	37.053	45.838	236	96.	53.4	1.61	23.8				
146	3267	3223	2.284	2.022	34.876	27.871	37.069	45.855	236	96.	53.5	1.64	23.7				
147	3520	3470	2.302	2.012	34.877	27.872	37.070	45.858	235	97.	53.4	1.60	23.7				
148	3676	3622	2.315	2.008	34.882	27.877	37.075	45.862	235	97.	53.3	1.60	23.7	792.	2208.	2360.	2206

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 38 Latitude 30- 0.3 S Longitude 1-50.0 E Date 10/24/83 Bottom Depth 3621 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
212	2	2	17.479	17.479	35.635	25.887	34.410	42.564	248	-13.	2.3	0.22	0.0	336.	2028.	2335	
125	3	2	17.462	17.461	35.632	25.889	34.412	42.566	247	-12							
213	19	19	17.470	17.467	35.633	25.889	34.411	42.566	247	-12.	2.2	0.21	0.0				
214	58	58	16.351	16.342	35.565	26.104	34.665	42.856	245	-5.	2.2	0.28	0.6				
215	98	98	16.312	16.296	35.582	26.128	34.690	42.882	244	-3.	2.3	0.28	0.7	352.	2040.	2338	
216	128	128	16.049	16.029	35.535	26.154	34.726	42.927	239	3.	2.5	0.34	1.6				
217	167	166	14.729	14.704	35.321	26.285	34.907	43.155	211	38.	3.6	0.65	7.2				
253	208	207	14.016	13.986	35.262	26.393	35.042	43.315	218	34.	3.7	0.65	7.6				
219	248	247	13.011	12.977	35.132	26.500	35.190	43.500	213	45.	4.1	0.79	9.9	496.	2081.	2305	
220	298	296	12.367	12.327	35.057	26.571	35.286	43.621	199	62.	5.4	0.99	13.2				
221	348	346	11.501	11.457	34.989	26.684	35.434	43.802	215	51.	5.6	0.97	13.3				
222	398	395	10.570	10.522	34.876	26.765	35.556	43.961	215	57.	6.5	1.08	15.4	579.	2105.	2300	
223	442	439	9.805	9.754	34.787	26.828	35.652	44.089	201	76.	8.8	1.29	18.6				
136	490	487	9.239	9.184	34.731	26.878	35.728	44.188	188	92.	11.4	1.46	21.1	727.	2139.	2296	
224	522	518	8.725	8.669	34.679	26.920	35.793	44.275	193	91.	12.8	1.52	21.9				
137	561	557	7.788	7.731	34.589	26.991	35.907	44.430	195	95.	15.2	1.62	24.1	783.	2147.	2291	
128	626	622	6.430	6.373	34.476	27.091	36.072	44.656	178	122.	19.2	1.94	29.4	953.	2172.	2287	
129	677	672	5.969	5.909	34.437	27.120	36.124	44.729	183	120.	20.2	1.96	30.1				
130	752	747	4.919	4.858	34.356	27.181	36.238	44.893	206	105.	24.0	1.98	30.2				
131	827	821	4.403	4.339	34.340	27.225	36.309	44.989	210	105.	27.8	2.03	30.7	946.	2175.	2291.	
132	902	895	4.022	3.955	34.338	27.264	36.368	45.066	205	113.	33.6	2.09	31.8				
133	977	969	3.760	3.688	34.372	27.318	36.435	45.146	199	121.	38.6	2.14	32.6				
134	1052	1043	3.568	3.492	34.398	27.358	36.485	45.205	194	127.	43.1	2.20	33.0				
135	1153	1143	3.197	3.116	34.467	27.449	36.595	45.332	186	138.	51.7	2.23	33.3				
126	1253	1242	3.018	2.930	34.543	27.527	36.681	45.427	184	141.	56.0	2.20	33.0	1096.	2218.	2316.	
127	1402	1389.	2.928	2.829	34.654	27.625	36.782	45.531	189	137.	56.6	2.08	31.3				
138	1554	1539	2.918	2.806	34.729	27.687	36.844	45.593	198	128.	53.3	1.94	29.3	982.	2211.	2326	
139	1704	1687	2.881	2.757	34.783	27.734	36.893	45.644	209	117.	50.4	1.82	27.7				
140	1903	1883	2.788	2.648	34.814	27.768	36.933	45.689	219	108.	49.4	1.75	26.4				
141	2103	2080	2.679	2.522	34.840	27.800	36.971	45.733	225	103.	49.3	1.67	25.4				
142	2305	2279	2.581	2.408	34.846	27.815	36.992	45.760	228	101.	50.5	1.64	25.1				
143	2507	2477	2.426	2.236	34.850	27.832	37.019	45.795	232	98.	53.1	1.65	24.9				
144	2761	2727	2.377	2.164	34.858	27.845	37.035	45.815	235	96.	53.0	1.62	24.5				
145	3017	2978	2.331	2.093	34.867	27.858	37.052	45.835	237	94.	53.0	1.60	24.0				
146	3219	3175	2.307	2.049	34.870	27.864	37.060	45.846	236	96.	53.5	1.59	24.0				
147	3435	3386	2.291	2.011	34.872	27.868	37.067	45.854	236	96.	54.6	1.57	24.1	810.	2200.	2347	
148	3653	3599	2.261	1.958	34.871	27.872	37.073	45.863	235	98.	55.7	1.60	24.2	804.	2201.	2349	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 39 Latitude 30-59.6 S Longitude 1-33.7 E Date 10/25/83 Bottom Depth 4430 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -	- - -	uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
225	2	2	17.471	17.471	35.623	25.880	34.403	42.557	249	-14.							
312	2	2	17.450	17.450	35.620	25.883	34.406	42.561	249	-14.	2.2	0.24	0.0	332.	2029.	2340	
313	49	49	16.574	16.566	35.587	26.069	34.622	42.805	247	-8.	2.1	0.27	0.2	345.	2031.	2332.	
314	89	88	16.344	16.330	35.574	26.114	34.676	42.867	243	-3.	2.2	0.31	0.7				
315	129	128	16.193	16.172	35.567	26.145	34.712	42.908	244	-3.	2.4	0.33	1.0				
316	169	168	15.673	15.647	35.472	26.192	34.779	42.993	232	12.	2.7	0.45	3.3				
317	208	207	14.756	14.725	35.333	26.290	34.911	43.158	220	29.	3.3	0.64	6.1				
353	248	247	13.819	13.783	35.214	26.399	35.056	43.337	222	31.	3.4	0.69	7.1				
319	298	296	13.065	13.024	35.131	26.490	35.177	43.486	214	44.	4.2	0.85	9.9				
320	333	331	12.319	12.275	35.052	26.577	35.295	43.631	204	58.	5.1	1.03	12.6				
321	368	366	11.611	11.564	34.986	26.661	35.408	43.772	213	53.	5.6	1.04	13.0				
322	399	396	11.099	11.049	34.936	26.717	35.485	43.869	215	54.	6.0	1.09	13.8				
323	449	446	10.354	10.300	34.846	26.780	35.581	43.995	213	60.	7.1	1.21	15.8				
236	501	498	9.163	9.107	34.718	26.880	35.734	44.197	207	74.	10.6	1.45	19.4				
324	558	554	8.547	8.487	34.664	26.936	35.817	44.307	174	111.	13.9	1.75	24.2				
237	601	597	7.505	7.445	34.562	27.011	35.941	44.477	191	101.	16.3	1.80	24.8				
228	651	646	6.675	6.614	34.488	27.068	36.038	44.611	192	106.	18.9	1.93	26.9				
229	700	695	5.757	5.696	34.409	27.124	36.139	44.754	200	104.	20.8	2.01	28.2				
230	750	744	5.342	5.279	34.388	27.157	36.193	44.828	197	111.	22.9	2.11	29.6				
231	800	794	4.918	4.853	34.370	27.193	36.250	44.905	197	114.	25.8	2.17	30.6				
232	866	859	4.518	4.450	34.361	27.230	36.308	44.982	194	120.	28.9	2.23	31.4				
233	946	939	3.937	3.867	34.343	27.277	36.385	45.088	207	111.	33.7	2.24	31.4				
234	1052	1043	3.519	3.443	34.399	27.364	36.493	45.216	193	129.	43.9	2.33	32.7				
235	1252	1241	3.097	3.009	34.494	27.480	36.631	45.374	186	139.	53.8	2.34	32.8				
226	1504	1489	2.949	2.841	34.639	27.611	36.769	45.518	187	139.	56.4	2.21	31.0				
227	1753	1735	2.918	2.789	34.740	27.697	36.855	45.605	202	124.	51.9	2.01	28.4				
238	2004	1983	2.750	2.601	34.804	27.765	36.932	45.691	217	110.	50.6	1.85	26.3				
239	2259	2233	2.574	2.405	34.829	27.801	36.979	45.747	226	103.	51.7	1.78	25.2				
240	2515	2485	2.452	2.261	34.843	27.825	37.010	45.785	232	98.	52.6	1.74	24.5				
241	2768	2734	2.381	2.167	34.852	27.840	37.030	45.810	236	95.	52.7	1.70	23.9				
242	3021	2981	2.342	2.104	34.861	27.852	37.046	45.829	237	94.	52.7	1.66	23.8				
243	3276	3231	2.318	2.054	34.866	27.860	37.056	45.842	237	95.	53.5	1.66	23.8				
244	3529	3478	2.304	2.014	34.866	27.863	37.062	45.849	237	95.	54.0	1.65	23.8				
245	3784	3728	2.231	1.915	34.858	27.865	37.069	45.862	236	97.	57.8	1.69	24.2				
246	4042	3979	1.814	1.481	34.812	27.861	37.090	45.906	229	108.	75.8	1.86	26.7				
247	4297	4228	1.326	0.979	34.755	27.850	37.108	45.952	222	119.	96.4	2.05	29.4				
248	4485	4411	1.188	0.824	34.750	27.856	37.123	45.975	220	123.	99.1	2.09	29.9				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 40 Latitude 31-59.8 S Longitude 1-17.1 E Date 10/25/83 Bottom Depth 4474 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	1	16.922	16.922	35.620	26.010	34.551	42.722	252	-14.				342.			
210	2	2	16.881	16.881	35.611	26.013	34.555	42.728	252	-14.	2.1	0.21	0.1				
211	28	28	16.647	16.642	35.618	26.075	34.625	42.805	252	-13.	2.1	0.21	0.1				
212	73	72	16.246	16.234	35.645	26.191	34.755	42.948	245	-4.	2.3	0.28	0.5				
213	107	107	15.855	15.838	35.578	26.230	34.809	43.016	242	1.	2.5	0.32	1.3				
214	146	145	15.287	15.265	35.494	26.295	34.895	43.121	243	3.	2.5	0.36	1.7	379.			
215	186	185	15.018	14.990	35.437	26.312	34.922	43.159	244	3.	2.3	0.37	1.8				
216	225	224	14.402	14.369	35.307	26.347	34.981	43.240	239	11.	2.9	0.48	3.8				
217	275	273	13.581	13.542	35.192	26.432	35.099	43.388	221	34.	3.9	0.69	7.6				
253	336	334	12.650	12.604	35.110	26.558	35.261	43.585	216	44.	4.7	0.86	10.3				
219	397	394	12.094	12.041	35.071	26.637	35.363	43.708	218	45.	4.7	0.90	11.3				
220	457	454	10.813	10.757	34.905	26.746	35.526	43.922	214	57.	6.0	1.12	14.8				
221	517	513	9.744	9.684	34.777	26.832	35.659	44.099	210	67.	6.7	1.32	17.8				
222	566	562	8.907	8.845	34.680	26.893	35.758	44.233	210	73.	7.9	1.47	19.8				
223	605	601	8.085	8.022	34.589	26.948	35.851	44.362	212	76.	9.5	1.58	21.8	713.			
136	647	642	7.426	7.362	34.521	26.991	35.925	44.465	214	79.	10.9	1.68	23.3				
224	720	715	6.286	6.221	34.422	27.068	36.057	44.649	215	86.	15.1	1.86	25.9				
137	796	790	5.205	5.139	34.335	27.132	36.176	44.818	226	83.	18.5	1.97	27.6				
128	874	867	4.335	4.268	34.297	27.199	36.287	44.971	227	88.	24.3	2.09	29.3	886.			
129	954	946	3.796	3.726	34.299	27.256	36.372	45.083	222	98.	30.2	2.19	30.7				
130	1053	1044	3.508	3.432	34.332	27.311	36.442	45.166	213	109.	37.2	2.27	31.7				
131	1152	1142	3.194	3.113	34.380	27.380	36.527	45.266	202	122.	45.1	2.34	32.8				
132	1272	1260	2.990	2.901	34.444	27.450	36.607	45.356	195	131.	51.9	2.38	33.1				
133	1391	1378	2.889	2.792	34.520	27.521	36.683	45.436	188	139.	57.0	2.38	33.1				
134	1541	1526	2.915	2.805	34.628	27.606	36.765	45.516	190	136.	56.9	2.27	31.7	1061.			
135	1688	1671	2.862	2.740	34.687	27.659	36.821	45.574	194	133.	56.3	2.16	30.2				
126	1890	1870	2.818	2.679	34.761	27.723	36.887	45.643	206	121.	53.2	1.99	28.1				
127	2144	2120	2.683	2.523	34.807	27.774	36.945	45.708	218	110.	52.6	1.88	26.4	892			
138	2396	2368	2.526	2.345	34.834	27.810	36.991	45.762	228	101.	52.9	1.81	25.3				
139	2650	2617	2.420	2.217	34.848	27.832	37.020	45.797	234	97.	53.0	1.73	24.6	836.			
140	2902	2864	2.369	2.142	34.858	27.846	37.038	45.819	236	95.	53.0	1.69	24.2				
141	3105	3063	2.345	2.098	34.863	27.854	37.048	45.831	237	94.	52.3	1.68	23.9				
142	3308	3262	2.321	2.054	34.866	27.860	37.056	45.842	237	95.	53.3	1.68	23.9	805.			
143	3512	3462	2.293	2.005	34.868	27.866	37.065	45.852	236	96.	54.9	1.69	24.0				
144	3716	3661	2.219	1.910	34.861	27.868	37.072	45.865	235	98.	58.3	1.71	24.5	816.			
145	3921	3862	2.052	1.725	34.839	27.864	37.079	45.882	232	103.	65.9	1.79	25.5				
146	4126	4062	1.627	1.290	34.791	27.858	37.098	45.924	226	113.	83.9	1.95	28.0	895.			
147	4332	4262	1.231	0.883	34.749	27.851	37.115	45.964	220	122.	100.5	2.09	30.0	957			
148	4541	4465	1.136	0.767	34.737	27.849	37.120	45.975									

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 41 Latitude 33- 1.1 S Longitude 0-59.7 E Date 10/26/83 Bottom Depth 4379 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
212	2	2	16.555	16.555	35.609	26.088	34.642	42.825	253	-14.	1.3	0.24	0.1	348.			
125	2	2	16.520	16.520	35.599	26.089	34.644	42.828	252	-13.							
213	40	39	16.210	16.204	35.583	26.150	34.716	42.911	252	-11.	1.4	0.25	0.1	349.			
214	79	78	15.919	15.907	35.556	26.198	34.774	42.979	248	-6.	1.9	0.31	0.6				
215	118	117	15.627	15.609	35.532	26.247	34.834	43.049	246	-2.	2.1	0.36	1.0				
216	158	157	15.261	15.237	35.469	26.282	34.883	43.111	240	6.	2.1	0.42	2.1				
217	198	197	14.902	14.872	35.407	26.315	34.930	43.171									
253	237	235	14.593	14.558	35.339	26.331	34.958	43.210	231	18.	2.2	0.55	4.3				
219	286	284	14.097	14.055	35.257	26.375	35.022	43.292	227	25.	2.7	0.64	5.8				
220	336	334	13.505	13.457	35.185	26.444	35.114	43.406	221	34.	3.2	0.75	7.9				
221	397	394	12.801	12.746	35.121	26.538	35.236	43.555	216	43.	4.4	0.88	10.1				
222	458	455	11.910	11.850	35.016	26.631	35.365	43.718	216	48.	4.7	0.99	12.0				
223	520	516	10.803	10.739	34.899	26.744	35.526	43.922	215	56.	5.8	1.17	14.7				
136	593	589	10.076	10.006	34.794	26.791	35.604	44.031	211	64.	6.9	1.29	16.7				
224	698	693	7.762	7.691	34.556	26.971	35.890	44.415	207	83.	13.1	1.70	23.1				
137	794	788	5.775	5.706	34.370	27.092	36.107	44.723	220	84.	17.6	1.92	26.8				
128	872	865	4.917	4.846	34.305	27.142	36.201	44.857	227	84.	20.7	2.02	28.2				
129	929	921	4.518	4.445	34.301	27.183	36.262	44.938	223	91.	24.6	2.09	29.2				
130	985	977	4.275	4.199	34.308	27.215	36.307	44.994	218	98.	28.1	2.15	30.1				
131	1085	1075	3.817	3.736	34.333	27.282	36.397	45.107	208	111.	35.7	2.26	31.6				
132	1184	1174	3.339	3.254	34.345	27.339	36.479	45.212	206	117.	41.7	2.30	32.1				
133	1284	1273	3.070	2.980	34.399	27.407	36.561	45.307	196	129.	49.9	2.36	32.9				
134	1384	1371	2.955	2.857	34.453	27.461	36.621	45.372	190	136.	55.1	2.38	33.2				
135	1535	1520	2.859	2.750	34.557	27.554	36.718	45.472	186	141.	59.2	2.31	32.6				
126	1686	1669	2.874	2.752	34.656	27.633	36.795	45.548	192	135.	57.4	2.17	30.7				
127	1839	1820	2.864	2.729	34.708	27.677	36.839	45.592	197	130.	55.5	2.07	29.5				
138	2042	2019	2.766	2.614	34.767	27.734	36.901	45.660			54.0	1.94	27.6				
139	2244	2218	2.636	2.467	34.792	27.766	36.941	45.707	216	113.	55.3	1.89	26.7				
140	2486	2456	2.553	2.363	34.820	27.798	36.978	45.748	226	103.	54.3	1.82	25.6				
141	2735	2700	2.435	2.223	34.832	27.819	37.007	45.784	231	99.	55.0	1.77	25.0				
142	2989	2949	2.366	2.131	34.843	27.835	37.028	45.810	235	96.	53.8	1.72	24.3				
143	3242	3198	2.323	2.063	34.853	27.849	37.045	45.830	236	96.	54.2	1.70	24.0				
144	3499	3448	2.295	2.008	34.855	27.855	37.054	45.842	237	95.	55.1	1.69	24.0				
145	3758	3701	2.229	1.916	34.850	27.858	37.062	45.855	235	98.	58.3	1.70	24.4				
146	4017	3954	2.024	1.688	34.825	27.856	37.073	45.878	231	104.	67.2	1.80	25.6				
147	4224	4157	1.512	1.168	34.767	27.847	37.094	45.927	224	116.	88.9	1.99	28.3				
148	4453	4379	1.239	0.877	34.755	27.857	37.121	45.970	222	120.	94.0	2.04	28.9				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 42 Latitude 33-59.1 S Longitude 1-14.9 E Date 10/26/83 Bottom Depth 4710 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
210	3	3	16.455	16.455	35.594	26.100	34.657	42.844	255	-15.	1.5	0.21	0.0	347.	2036.	2337.	
125	3	3	16.493	16.493	35.601	26.097	34.652	42.838	255	-15.							
211	25	25	16.064	16.060	35.549	26.157	34.728	42.928	259	-17.	1.4	0.21	0.0				
212	65	64	15.869	15.859	35.539	26.196	34.774	42.981	253	-10.	2.1	0.26	0.5				
213	109	108	15.505	15.488	35.522	26.266	34.858	43.077	245	-1.	2.4	0.36	1.4				
214	139	138	15.450	15.428	35.518	26.277	34.870	43.091	245	0.	2.3	0.37	1.5				
215	189	188	15.432	15.403	35.513	26.279	34.874	43.095	245	0.	2.3	0.35	1.4				
216	239	237	15.357	15.320	35.495	26.283	34.881	43.106	246	-1.	2.3	0.35	1.5	374.	2049.	2333	
217	298	296	14.391	14.347	35.300	26.346	34.982	43.241	238	12.	2.4	0.48	3.9				
253	358	356	13.020	12.970	35.152	26.517	35.206	43.516	218	40.	3.8	0.79	9.2				
219	417	414	12.279	12.223	35.062	26.595	35.314	43.652	216	46.	4.6	0.89	10.9				
220	476	473	11.190	11.130	34.932	26.699	35.464	43.845	216	52.	5.5	1.06	13.6				
221	548	544	9.924	9.860	34.778	26.803	35.623	44.055	214	62.	7.5	1.25	17.0	618.	2118.	2302.	
222	588	584	9.300	9.234	34.710	26.854	35.701	44.160	210	70.	8.6	1.36	18.9				
223	628	624	8.857	8.788	34.672	26.895	35.763	44.240	203	80.	10.7	1.50	20.6				
136	708	702	7.173	7.104	34.511	27.019	35.966	44.517	206	88.	14.2	1.74	24.4				
224	748	742	6.176	6.108	34.413	27.075	36.070	44.667	211	91.	17.4	1.88	26.6				
137	789	783	5.552	5.484	34.370	27.119	36.145	44.771	218	88.	18.7	1.95	27.3				
128	870	863	4.730	4.660	34.321	27.175	36.243	44.908	226	86.	22.9	2.03	28.8				
129	961	953	4.148	4.075	34.311	27.230	36.328	45.021	221	96.	27.3	2.13	30.1	921.	2171.	2291.	
130	1052	1043	3.741	3.663	34.320	27.279	36.398	45.111	216	104.	33.6	2.22	31.1	964.	2177.	2291.	
131	1204	1194	3.212	3.127	34.377	27.376	36.522	45.261	203	121.	45 2	2.32	32.6				
132	1405	1392	2.817	2.719	34.483	27.498	36.664	45.421	195	132.	54.7	2.32	32.6				
133	1607	1591	2.765	2.651	34.603	27.599	36.767	45.527	192	136.	58.9	2.24	31.4	1047.	2216.	2322	
134	1809	1790	2.719	2.588	34.679	27.666	36.836	45.597	198	130.	59.5	2.13	30.1				
135	2010	1988	2.685	2.537	34.753	27.729	36.901	45.664	209	119.	57.4	1.98	28.1				
126	2212	2187	2.618	2.453	34.795	27.770	36.946	45.712	216	113.	56.2	1.89	26.8	915.	2205.	2332.	
127	2414	2385	2.550	2.367	34.824	27.801	36.981	45.751	225	104.	55.0	1.81	25.6				
138	2617	2584	2.447	2.247	34.831	27.816	37.002	45.779	229	101.	56.0	1.78	25.4				
139	2820	2784	2.401	2.182	34.843	27.831	37.021	45.800	234	97.	54.8	1.74	24.6				
140	3022	2982	2.303	2.066	34.843	27.841	37.037	45.822	234	98.	57.2	1.74	24.7				
141	3226	3181	2.277	2.019	34.849	27.849	37.048	45.835	237	95.	56.8	1.71	24.4	829.	2196.	2339	
142	3429	3380	2.161	1.885	34.836	27.849	37.056	45.850	233	100.	62.5	1.76	25.1				
143	3632	3579	2.012	1.718	34.823	27.852	37.067	45.871	232	103.	68.4	1.82	25.9				
144	3835	3777	1.641	1.335	34.792	27.855	37.093	45.917	229	109.	76.2	1.89	27.0	892.	2218.	2351	
145	4037	3974	1.256	0.940	34.752	27.850	37.111	45.956	222	120.	97.9	2.07	29.6				
146	4284	4215	1.150	0.810	34.740	27.849	37.117	45.970	222	121.	102.9	2.12	30.4	968.	2243.	2366	
147	4554	4477	1.093	0.724	34.732	27.848	37.121	45.979	220	124.	106.4	2.16	30.7	982.	2241.	2362.	
148	4780	4697	1.094	0.699	34.732	27.849	37.124	45.983	219	125.	106.4	2.15	30.7	977.	2242.	2363.	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 43 Latitude 35- 0.3 S Longitude 1- 6 1 E Date 10/27/83 Bottom Depth 4873 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	2	16.123	16.123	35.553	26.146	34.715	42.912	253	-12.							
212	3	2	16.164	16.164	35.568	26.148	34.715	42.911	253	-12.	1.1	0.22	0.1	354.	2035.	2330.	
213	25	24	16.132	16.128	35.568	26.156	34.725	42.922	254	-13.	1.2	0.22	0.1	354.	2038.	2334.	
214	49	49	15.681	15.673	35.541	26.239	34.824	43.037	255	-11.	1.2	0.23	0.2				
215	89	88	15.570	15.556	35.539	26.264	34.853	43.070	248	-4.	2.0	0.29	0.8				
216	128	127	15.444	15.424	35.541	26.295	34.889	43.110	242	3.	1.9	0.36	1.4				
217	178	177	14.948	14.921	35.430	26.322	34.935	43.173	241	6.	2.1	0.40	2.3				
253	227	226	13.897	13.864	35.245	26.406	35.060	43.337	225	28.	2.9	0.63	6.2				
219	278	276	13.197	13.158	35.193	26.511	35.192	43.495	220	37.	3.2	0.74	8.3				
220	338	335	12.394	12.349	35.105	26.604	35.318	43.651	217	44.	4.1	0.88	10.7				
221	397	395	11.680	11.629	35.025	26.679	35.423	43.784	217	48.	4.4	0.99	12.3				
222	457	454	10.686	10.630	34.903	26.767	35.552	43.953	217	54.	4.9	1.12	14.7				
223	506	502	9.593	9.535	34.760	26.843	35.677	44.123	206	72.	8.4	1.38	18.5				
152	569	564	8.578	8.517	34.652	26.922	35.802	44.291	204	81.	10.8	1.56	21.3				
224	665	660	6.839	6.776	34.480	27.040	36.002	44.568	207	90.	14.9	1.81	25.2				
137	777	771	5.206	5.142	34.320	27.120	36.164	44.806	232	77.	16.9	1.93	27.1				
128	886	879	4.206	4.139	34.280	27.199	36.294	44.985	232	84.	24.1	2.07	29.3				
129	995	987	3.756	3.683	34.288	27.252	36.370	45.083	227	93.	29.6	2.16	30.4				
130	1171	1161	3.156	3.074	34.335	27.348	36.497	45.239	213	112.	41.2	2.29	32.3				
131	1346	1334	2.881	2.787	34.441	27.458	36.621	45.376	198	129.	52.3	2.35	33.0				
132	1599	1583	2.752	2.639	34.596	27.595	36.764	45.524	190	138.	60.2	2.28	32.0				
133	1751	1732	2.762	2.636	34.669	27.654	36.822	45.580	192	135.	60.5	2.19	30.9				
134	1903	1882	2.745	2.606	34.727	27.703	36.871	45.630	200	128.	65.2	2.09	29.4				
135	2099	2076	2.675	2.519	34.780	27.752	36.925	45.688	211	117.	56.9	1.97	27.7				
126	2300	2273	2.627	2.453	34.810	27.782	36.958	45.723	221	108.	55.3	1.87	26.2				
127	2503	2472	2.503	2.312	34.828	27.808	36.991	45.764	226	104.	56.0	1.84	25.8				
138	2705	2670	2.432	2.223	34.840	27.825	37.013	45.790	229	101.	56.0	1.80	25.3				
139	2907	2868	2.350	2.123	34.847	27.839	37.032	45.814	233	98.	56.5	1.78	24.9				
140	3105	3063	2.290	2.044	34.852	27.850	37.047	45.833	235	97.	57.1	1.76	24.8				
141	3307	3261	2.256	1.990	34.854	27.856	37.056	45.844	235	97.	57.9	1.75	24.7				
142	3510	3458	2.203	1.917	34.853	27.861	37.065	45.857	234	99.	59.9	1.76	24.8				
143	3714	3658	2.025	1.722	34.833	27.860	37.075	45.878	231	104.	68.0	1.84	26.0				
144	3917	3856	1.626	1.312	34.788	27.854	37.092	45.918	227	111.	78.4	1.94	27.4				
145	4121	4055	1.323	0.995	34.759	27.852	37.109	45.952	221	120.	96.7	2.10	29.6				
146	4375	4302	1.160	0.809	34.744	27.852	37.120	45.973	220	123.	104.2	2.17	30.5				
136	4631	4551	1.121	0.742	34.737	27.851	37.123	45.979									
148	4951	4863	1.103	0.668	34.732	27.850	37.125	45.985	220	124.	108.4	2.21	30.9				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 44 Latitude 36- 0.3 S Longitude 1- 0.9 E Date 10/27/83 Bottom Depth 4972 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
225	2	2	15.023	15.023	35.249	26.160	34.771	43.009	263	-16.							
412	3	3	14.977	14.977	35.248	26.169	34.783	43.022	265	-18.	1.2	0.22	0.4	366.	2032.	2316.	2038
413	35	35	14.630	14.625	35.247	26.245	34.871	43.122	265	-16.	1.2	0.24	0.6				
414	69	69	13.973	13.963	35.225	26.370	35.020	43.294	254	-1.	1.8	0.38	2.1				
415	104	103	13.724	13.709	35.188	26.394	35.055	43.338	255	-1.	1.9	0.43	2.5	407.	2050.	2312.	
173	111	110	13.664	13.648	35.179	26.400	35.063	43.348			1.7	0.32	2.0				
416	144	143	13.564	13.544	35.178	26.421	35.088	43.377	246	9.	2.3		3.8				
417	164	163	13.507	13.484	35.228	26.472	35.140	43.431	228	27.	2.7	0.64	6.8				
453	200	198	13.183	13.155	35.241	26.549	35.230	43.532	224	33.	2.8	0.71	8.1				
419	249	247	12.522	12.488	35.162	26.621	35.328	43.656	223	37.	3.6	0.80	9.6	489.	2074.	2300	
174	259	257	12.701	12.666	35.174	26.595	35.296	43.616			3.1	0.75	9.2				
420	299	297	12.030	11.991	35.093	26.664	35.392	43.738	223	40.	3.8	0.90	10.9				
421	349	347	11.120	11.076	34.966	26.736	35.502	43.885	219	50.	4.9	1.05	13.4				
422	424	421	9.817	9.768	34.794	26.831	35.655	44.090	215	62.	6.5	1.27	17.2				
375	508	504	8.169	8.116	34.611	26.951	35.850	44.356			10.6	1.43	21.6				
423	524	520	7.939	7.885	34.587	26.967	35.876	44.392	204	85.	11.8	1.63	22.7				
236	627	622	6.613	6.555	34.470	27.062	36.035	44.611	203	95.	17.3	1.86	26.1	828.	2152.	2287	
424	725	719	4.800	4.742	34.309	27.157	36.221	44.882	229	83.	20.1	1.97	28.2				
237	828	821	4.199	4.136	34.261	27.184	36.280	44.971	239	77.	21.7	1.98	28.6				
376	860	853	3.825	3.762	34.254	27.217	36.332	45.041			24.3	1.96	29.1				
228	914	906	3.708	3.642	34.256	27.230	36.352	45.067	237	83.	26.5	2.06	29.8	900.	2168.	2291.	
229	1030	1021	3.366	3.293	34.293	27.294	36.432	45.164	223	100.	32.9	2.17	31.3				
577	1091	1081	3.181	3.105	34.326	27.337	36.486	45.226			39.3	2.11	31.8				
230	1156	1145	3.048	2.968	34.367	27.383	36.538	45.284	207	118.	45.3	2.28	32.5	1030.	2204.	2310	
231	1306	1294	2.849	2.759	34.454	27.471	36.635	45.392	196	131.	53.1	2.28	32.8				
232	1458	1443	2.762	2.660	34.531	27.541	36.710	45.469	193	135.	57.8	2.25	32.5	1080.	2217.	2318	
233	1609	1592	2.739	2.625	34.620	27.615	36.785	45.545	189	139.	60.9	2.19	31.6	1061.	2223.	2327.	2221.
234	1760	1741	2.719	2.592	34.676	27.663	36.833	45.594	195	133.	61.1	2.08	30.4	1031.	2218.	2327	
235	1912	1891	2.696	2.556	34.720	27.701	36.873	45.635	200	128.	60.7	2.01	29.4	992.	2213.	2327	
226	2061	2038	2.655	2.503	34.762	27.740	36.913	45.677	208	120.	59.5	1.94	28.1				
227	2213	2187	2.623	2.458	34.791	27.767	36.942	45.708	213	116.	58.2	1.87	27.2				
238	2465	2435	2.544	2.356	34.821	27.799	36.980	45.750	222	107.	56.9	1.79	26.1	890.	2200.	2331.	
239	2716	2681	2.419	2.210	34.833	27.821	37.009	45.787	228	103.	58.1	1.76	25.6				
240	2969	2929	2.321	2.089	34.842	27.838	37.033	45.817	232	100.	59.0	1.69	25.1	846.	2196.	2335	
241	3223	3177	2.232	1.976	34.843	27.848	37.049	45.839	233	100.	60.9	1.71	25.1	844.	2201.	2341.	2197.
242	3477	3426	2.100	1.820	34.836	27.854	37.064	45.862	232	102.	65.7	1.73	25.5	847.	2208.	2349	
243	3733	3676	1.763	1.465	34.799	27.851	37.081	45.899	225	112.	80.4	1.89	27.5				
244	3990	3926	1.383	1.068	34.764	27.851	37.104	45.943	222	119.	94.9	1.98	29.1	949.	2237.	2362.	
245	4247	4178	1.194	0.856	34.746	27.851	37.116	45.966	220	123.	101.5	2.09	30.0				
246	4501	4424	1.129	0.765	34.738	27.850	37.121	45.976	219	124.	105.3	2.08	30.5	973.	2246.	2368	
247	4756	4672	1.117	0.724	34.735	27.850	37.123	45.981	219	125.	106.5	2.11	30.5	983.	2247.	2368.	
248	5052	4959	1.125	0.697	34.732	27.850	37.124	45.983	219	125.	107.1	2.13	30.8	978.	2247.	2369.	2244

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 45 Latitude 37- 0.4 S Longitude 1- 0.4 E Date 10/28/83 Bottom Depth 4943 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	2	14.287	14.287	35.179	26.265	34.905	43.168	264	-13.							
212	3	2	14.309	14.309	35.174	26.257	34.896	43.158	264	-13.	1.3	0.32	1.3	383.	2032.	2305.	
213	34	34	14.244	14.239	35.175	26.273	34.913	43.179	264	-13.	1.2	0.32	1.4	382.	2035.	2309	
214	68	68	13.388	13.379	35.002	26.318	34.994	43.291	265	-9.	1.5	0.42	2.5				
215	98	97	12.992	12.979	34.951	26.360	35.051	43.364	262	-4.	1.8	0.49	3.2				
216	123	122	13.181	13.164	35.083	26.425	35.107	43.411	255	2.	1.7	0.49	3.2				
217	137	136	12.716	12.697	34.999	26.453	35.155	43.477	259	1.	1.7	0.55	3.9				
253	168	167	12.629	12.606	35.025	26.491	35.196	43.521	258	2.	1.7	0.57	4.4				
219	196	195	12.440	12.414	34.989	26.501	35.214	43.546	256	5.	1.8	0.62	5.1				
220	227	225	12.860	12.829	35.182	26.569	35.263	43.578	225	34.	2.9	0.77	8.4				
221	267	265	12.262	12.227	35.108	26.630	35.349	43.686	224	38.	3.1	0.86	9.8				
222	315	313	11.574	11.534	35.011	26.686	35.434	43.798	224	42.	3.9	0.97	11.5				
223	397	394	10.045	9.998	34.808	26.803	35.616	44.043	219	56.	5.5	1.22	15.8				
136	489	485	8.766	8.713	34.663	26.900	35.771	44.252	213	71.	8.0	1.47	19.8				
224	563	559	7.536	7.480	34.526	26.978	35.907	44.441	217	75.	10.3	1.65	22.6				
137	654	649	5.729	5.673	34.350	27.080	36.097	44.714	231	74.	13.9	1.85	25.6				
128	749	743	4.708	4.649	34.272	27.138	36.207	44.873	241	72.	17.7	1.97	27.3				
129	840	833	4.063	4.000	34.248	27.188	36.291	44.988	241	77.	21.8	2.04	28.5				
130	1006	997	3.438	3.367	34.266	27.265	36.401	45.129	232	91.	30.5	2.15	30.4				
131	1206	1195	2.974	2.891	34.373	27.395	36.553	45.304	205	121.	46.7	2.29	32.7				
132	1406	1392	2.789	2.691	34.481	27.498	36.666	45.425	193	134.	55.8	2.31	32.8				
133	1575	1558	2.719	2.608	34.562	27.570	36.742	45.503	188	140.	61.1	2.28	32.5				
134	1653	1636	2.716	2.599	34.604	27.605	36.776	45.537	191	137.	59.9	2.20	31.6				
135	1895	1874	2.667	2.530	34.695	27.684	36.857	45.620	199	129.	60.8	2.11	29.8				
126	2152	2127	2.619	2.459	34.759	27.741	36.917	45.683	209	120.	59.3	1.95	28.1				
127	2407	2377	2.542	2.360	34.798	27.781	36.961	45.732	217	112.	58.3	1.88	26.8				
138	2659	2625	2.472	2.267	34.827	27.811	36.997	45.772	224	106.	57.1	1.81	25.7				
139	2908	2869	2.363	2.136	34.832	27.826	37.019	45.800	229	102.	58.8	1.78	25.4				
140	3168	3124	2.264	2.013	34.835	27.839	37.038	45.826	231	101.	60.6	1.76	25.1				
141	3425	3375	2.067	1.794	34.828	27.850	37.061	45.861	226	108.	66.2	1.84	26.1				
142	3679	3623	1.693	1.403	34.789	27.848	37.082	45.902	224	114.	82.6	1.94	27.6				
143	3936	3874	1.338	1.030	34.757	27.848	37.104	45.944	221	120.	95.3	2.05	29.2				
144	4192	4123	1.137	0.807	34.738	27.848	37.116	45.969	220	123.	103.4	2.11	30.1				
145	4448	4372	1.078	0.722	34.731	27.847	37.120	45.978	220	124.	106.6	2.13	30.4				
146	4651	4570	1.069	0.690	34.729	27.848	37.123	45.982	220	124.	107.9	2.13	30.6				
147	4806	4720	1.079	0.682	34.729	27.848	37.124	45.984	220	124.	108.2	2.13	30.6				
148	4961	4871	1.086	0.670	34.727	27.847	37.124	45.984	220	124.	108.6	2.12	30.5				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 46 Latitude 38- 0.2 S Longitude 0-59.6 E Date 10/28/83 Bottom Depth 4763 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
210	2	2	12.071	12.071	34.629	26.288	35.019	43.369	277	-13.	2.1	0.60	5.6	430.	2038.	2282.	
125	4	3	12.152	12.151	34.654	26.292	35.020	43.366	278	-15.							
211	29	28	12.089	12.085	34.638	26.292	35.023	43.372	280	-16.	2.1	0.61	5.6				
212	44	43	12.020	12.014	34.687	26.344	35.076	43.427	277	-13.	2.0	0.57	5.3				
213	69	68	12.195	12.186	34.897	26.474	35.197	43.539	265	-2.	2.1	0.56	4.6				
214	88	87	11.597	11.586	34.821	26.529	35.277	43.642	266	0.	2.1	0.64	5.5				
215	117	116	11.207	11.192	34.734	26.534	35.299	43.680	269	-1.	2.1	0.67	6.4				
216	147	146	10.882	10.864	34.666	26.540	35.320	43.714	273	-3.	2.2	0.72	7.3				
217	182	180	10.560	10.538	34.635	26.574	35.367	43.775	266	6.	2.2	0.80	9.1				
253	222	221	10.221	10.195	34.717	26.698	35.504	43.924	248	26.	3.4	0.96	12.3				
219	277	275	9.565	9.534	34.699	26.796	35.631	44.077	237	41.	4.7	1.11	15.1				
220	338	336	8.716	8.680	34.617	26.869	35.742	44.225	234	50.	6.1	1.30	18.0				
221	398	395	7.828	7.788	34.534	26.939	35.854	44.375	227	63.	8.0	1.49	21.1				
222	459	455	6.647	6.605	34.406	27.005	35.976	44.551	232	66.	10.0	1.64	23.7				
223	538	534	5.329	5.285	34.294	27.083	36.120	44.756	241	67.	13.1	1.81	26.3				
126	623	618	4.640	4.592	34.248	27.125	36.198	44.867	247	66.	15.5	1.90	27.2	827.	2133.	2265.	
224	678	673	4.227	4.176	34.234	27.159	36.252	44.942	250	66.	18.3	1.95	27.9	836.	2141.	2272.	
127	749	742	3.881	3.827	34.228	27.190	36.302	45.008	248	71.	21.4	2.01	28.7	864.	2147.	2274.	
128	848	841	3.438	3.379	34.230	27.235	36.370	45.099	243	79.	26.6	2.08	29.8	811.	2155.	2293	
129	949	941	3.134	3.069	34.266	27.293	36.444	45.187	230	95.	33.9	2.20	31.2				
130	1050	1041	2.988	2.917	34.316	27.347	36.505	45.255	217	109.	40.9	2.27	32.2				
131	1177	1166	2.871	2.791	34.378	27.407	36.572	45.327	205	122.	48.2	2.33	32.8				
132	1328	1315	2.783	2.692	34.482	27.499	36.667	45.426	195	132.	55.2	2.33	32.7				
133	1479	1464	2.740	2.637	34.558	27.565	36.734	45.495	193	135.	58.7	2.29	32.2				
134	1605	1588	2.725	2.612	34.613	27.611	36.781	45.542	193	135.	59.5	2.22	31.3	943.	2213.	2336.	
135	1754	1735	2.692	2.566	34.668	27.659	36.831	45.593	195	133.	61.4	2.18	30.6				
136	1930	1909	2.670	2.529	34.725	27.708	36.880	45.644	198	130.	61.6	2.11	29.5				
137	2156	2130	2.612	2.452	34.776	27.755	36.931	45.698	208	121.	60.2	1.98	28.0				
138	2409	2379	2.535	2.353	34.809	27.790	36.971	45.742	218	111.	58.7	1.91	26.5				
139	2662	2628	2.449	2.244	34.825	27.812	36.998	45.774	224	106.	58.9	1.84	26.1				
140	2910	2871	2.358	2.131	34.832	27.827	37.019	45.801	227	104.	60.2	1.81	25.9				
141	3163	3118	2.244	1.994	34.834	27.839	37.039	45.828	232	100.	62.3	1.79	25.6	870.	2201.	2336.	
142	3417	3366	2.104	1.831	34.828	27.847	37.056	45.854	229	105.	66.8	1.79	26.0				
143	3622	3567	1.875	1.586	34.808	27.850	37.073	45.884	227	109.	76.0	1.89	27.0				
144	3828	3768	1.613	1.309	34.783	27.850	37.089	45.914	223	115.	87.0	1.95	28.3				
145	4035	3970	1.309	0.991	34.756	27.850	37.107	45.950	221	120.	97.7	2.04	29.5				
146	4295	4223	1.138	0.797	34.740	27.850	37.119	45.972	220	123.	104.9	2.09	30.3				
147	4553	4474	1.060	0.692	34.731	27.849	37.124	45.984	220	124.	108.0	2.12	30.7	986.	2240.	2360.	
148	4831	4745	1.051	0.652	34.729	27.850	37.127	45.989	220	124.	109.3	2.13	30.8	998.	2240.	2358.	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 47 Latitude 39- 0.5 S Longitude 0-59.2 E Date 10/29/83 Bottom Depth 5076 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	2	12.060	12.060	34.668	26.320	35.052	43.401	275	-11.							
201	3	3	12.082	12.082	34.674	26.321	35.051	43.400	274	-10.	1.6	0.59	5.1	435.	2040.	2282	
202	40	40	12.058	12.053	34.674	26.326	35.058	43.407	274	-10.	1.6	0.61	5.1	431.	2042.	2287.	
203	79	78	11.127	11.117	34.661	26.491	35.260	43.645	271	-2.	1.7	0.70	6.4				
204	118	118	10.951	10.937	34.640	26.507	35.284	43.676	269	1.	1.9	0.74	6.8				
205	143	142	10.562	10.545	34.575	26.526	35.320	43.728	272	0.	2.0	0.80	7.8				
206	167	166	10.058	10.039	34.494	26.551	35.367	43.796	276	0.	2.0	0.87	8.9				
207	203	202	10.962	10.937	34.763	26.603	35.378	43.768	253	17.	2.4	0.87	10.0				
208	242	241	10.666	10.637	34.840	26.716	35.503	43.904	236	35.	3.5	1.01	12.3				
209	288	286	9.544	9.512	34.704	26.803	35.639	44.086	235	43.	4.7	1.18	15.2				
210	333	331	8.531	8.496	34.596	26.881	35.763	44.254	230	55.	6.2	1.39	18.7				
211	378	375	7.561	7.524	34.499	26.950	35.878	44.411	226	66.	8.0	1.57	21.6				
212	421	418	6.749	6.710	34.425	27.005	35.972	44.541	227	70.	9.9	1.71	23.9				
126	499	495	5.437	5.396	34.316	27.087	36.118	44.749	236	71.	13.5	1.86	26.2				
213	570	565	4.554	4.511	34.245	27.131	36.208	44.881	247	67.	16.3	1.96	27.4				
127	648	643	4.048	4.001	34.226	27.170	36.273	44.971	249	69.	19.3	2.00	28.3				
128	748	741	3.646	3.593	34.228	27.213	36.337	45.055									
129	846	839	3.271	3.213	34.252	27.268	36.412	45.148	235	89.	30.6	2.18	30.7				
130	944	936	3.061	2.997	34.285	27.315	36.469	45.216	224	101.							
131	1092	1082	2.921	2.847	34.372	27.398	36.559	45.312	207	119.	45.9	2.32	32.8				
132	1286	1273	2.738	2.650	34.496	27.514	36.684	45.445	191	137.	58.3	2.35	33.2				
133	1482	1466	2.704	2.601	34.585	27.589	36.760	45.522	191	137.	60.1	2.27	32.1				
134	1675	1657	2.714	2.595	34.668	27.656	36.827	45.587	186	142.	64.7	2.22	31.3				
135	1862	1841	2.653	2.518	34.731	27.713	36.886	45.650	199	129.	61.8	2.07	29.5				
136	2113	2088	2.634	2.477	34.785	27.760	36.935	45.700	208	120.	58.9	1.95	27.8				
137	2362	2332	2.556	2.378	34.821	27.797	36.977	45.746	219	110.	56.5	1.84	26.3				
138	2615	2581	2.464	2.263	34.835	27.818	37.003	45.779	226	104.	56.1	1.79	25.6				
139	2871	2832	2.372	2.148	34.839	27.831	37.022	45.803	229	102.	57.5	1.77	25.4				
140	3126	3082	2.280	2.033	34.839	27.840	37.038	45.825	230	102.	59.8	1.76	25.4				
141	3379	3330	2.146	1.876	34.832	27.847	37.054	45.849	229	104.	64.1	1.79	25.7				
142	3586	3532	1.950	1.663	34.815	27.850	37.068	45.875	227	108.	72.4	1.85	26.5				
143	3797	3737	1.689	1.386	34.791	27.851	37.085	45.907	224	114.	82.8	1.94	27.8				
144	4010	3945	1.400	1.082	34.763	27.849	37.102	45.940	222	118.	93.7	2.02	29.2				
145	4274	4202	1.182	0.842	34.742	27.848	37.115	45.966	221	122.	102.3	2.08	30.1				
146	4537	4458	1.098	0.731	34.734	27.849	37.122	45.979	220	124.	105.9	2.11	30.6				
147	4786	4700	1.069	0.674	34.730	27.849	37.125	45.986	222	122.	108.0	2.13	30.8				
148	5089	4995	1.076	0.645	34.728	27.849	37.127	45.989	220	124.	108.8	2.13	30.8				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 48 Latitude 40- 1.0 S Longitude 0-59.4 E Date 10/29/83 Bottom Depth 4909 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - - -		uM/KG -	- - - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	3	2	10.640	10.640	34.420	26.389	35.181	43.587	286	-14.				457.	2056.	2288.	
210	3	3	10.653	10.653	34.417	26.384	35.176	43.582	287	-15.	1.9	0.76	8.3				2050.
211	68	68	9.835	9.827	34.414	26.524	35.350	43.789	282	-5.	2.0	0.85	9.5				
212	106	105	9.248	9.236	34.408	26.617	35.469	43.932	282	-1.	2.4	0.94	10.9				
213	146	145	9.098	9.082	34.529	26.737	35.593	44.061	261	20.	3.8	1.10	14.3				
214	184	182	8.762	8.742	34.545	26.803	35.675	44.156	254	30.	4.8	1.19	16.0				
215	223	222	8.153	8.130	34.516	26.875	35.774	44.281	244	44.	6.5	1.35	18.7	640.	2121.	2297	
216	269	267	7.553	7.527	34.467	26.925	35.852	44.386	244	48.	7.4	1.46	20.4				
217	318	315	6.741	6.712	34.400	26.986	35.952	44.522	240	57.	9.1	1.60	23.1				
253	357	354	6.376	6.344	34.380	27.019	36.003	44.589	236	64.	10.3	1.69	24.4				
219	405	402	5.534	5.500	34.317	27.075	36.101	44.727	241	65.	12.4	1.84	25.9				
220	478	474	4.809	4.772	34.255	27.111	36.174	44.834	247	65.	14.4	1.90	27.0				
221	551	547	4.311	4.270	34.227	27.143	36.232	44.917	256	60.	16.7	1.95	27.7	833.	2142.	2274	
222	593	588	4.073	4.030	34.221	27.163	36.265	44.962	253	64.	18.5	1.98	28.0	844.	2152.	2283.	2149
223	641	635	3.863	3.817	34.215	27.180	36.293	45.000	255	64.	20.2	2.03	28.5	859.	2160.	2289	
126	719	713	3.581	3.531	34.229	27.220	36.347	45.068	244	77.	24.5	2.07	29.3				
224	737	731	3.478	3.427	34.228	27.229	36.362	45.088	246	76.	25.9	2.09	29.6				
127	838	831	3.228	3.171	34.246	27.268	36.414	45.152	236	88.	30.6	2.15	30.7	933.	2161.	2277	
128	936	928	3.005	2.942	34.288	27.322	36.479	45.229	223	103.	37.5	2.23	31.8				
129	1034	1025	2.883	2.814	34.338	27.373	36.537	45.292	211	116.	44.8	2.30	32.7	1048.	2188.	2290	
130	1135	1124	2.793	2.717	34.401	27.432	36.600	45.359	198	129.	51.9	2.35	33.3				
131	1261	1248	2.754	2.668	34.468	27.490	36.660	45.420	188	140.	58.4	2.35	33.6	1113.	2207.	2302	
132	1410	1395	2.726	2.629	34.556	27.564	36.734	45.495	182	146.	63.6	2.34	33.2	1134.	2228.	2322.	2229.
133	1558	1541	2.692	2.583	34.624	27.622	36.794	45.556	183	145.	65.4	2.26	32.2	1095.	2235.	2336.	
134	1690	1672	2.685	2.565	34.681	27.669	36.841	45.603	189	139.	65.0	2.15	31.1				
135	1830	1810	2.657	2.525	34.729	27.711	36.884	45.647	197	131.	62.7	2.06	29.6				
136	1985	1962	2.649	2.504	34.773	27.748	36.922	45.685	205	123.	60.1	1.95	28.3				
137	2239	2212	2.605	2.437	34.812	27.785	36.961	45.728	216	113.	57.2	1.84	26.6				
138	2491	2459	2.456	2.267	34.815	27.802	36.987	45.762	219	111.	59.8	1.83	26.5				
139	2745	2708	2.377	2.166	34.830	27.822	37.013	45.793	225	106.	59.8	1.79	25.9				
140	2996	2954	2.289	2.055	34.837	27.837	37.033	45.819	229	103.	60.9	1.75	25.6	869.	2212.	2348	
141	3245	3198	2.189	1.931	34.832	27.843	37.046	45.838	230	103.	63.9	1.77	25.8				
142	3497	3444	1.949	1.671	34.810	27.845	37.063	45.870	226	109.	74.6	1.86	27.0				
143	3746	3688	1.648	1.352	34.785	27.848	37.085	45.908	222	116.	85.1	1.94	28.1				
144	3952	3888	1.410	1.098	34.763	27.848	37.100	45.937	222	118.	94.0	2.00	29.1				
145	4157	4088	1.230	0.901	34.748	27.849	37.112	45.960	221	121.	100.4	2.05	29.8				
146	4409	4333	1.091	0.739	34.735	27.849	37.122	45.979	222	122.	105.8	2.09	30.4				
147	4667	4584	1.048	0.668	34.731	27.851	37.127	45.988	220	124.	108.7	2.10	30.7				
148	4966	4874	1.046	0.621	34.728	27.850	37.129	45.992	220	125.	110.0	2.12	30.9	989.	2238.	2357.	2246.

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 49 Latitude 41-21.2 S Longitude 0-58 8 E Date 10/30/83 Bottom Depth 1927 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	2	8.946	8.946	34.378	26.640	35.505	43.980	292	-9.	2.2	0.94	11.5	508.	2066.	2277.	
126	30	29	8.943	8.940	34.377	26.640	35.505	43.981	292	-9.	2.2	0.95	11.6	506.	2063.	2275.	
127	70	69	8.802	8.795	34.373	26.660	35.532	44.013	292	-8.	2.2	0.97	11.7				
128	99	99	8.522	8.512	34.358	26.692	35.577	44.070	290	-5.	2.3	1.01	12.5				
129	129	128	8.425	8.412	34.362	26.711	35.600	44.097	288	-2.	2.6	1.06	12.9				
130	168	167	8.026	8.009	34.360	26.770	35.677	44.192	287	2.	2.8	1.10	13.9				
131	208	206	7.616	7.596	34.373	26.841	35.767	44.298	274	17.	4.1	1.25	16.7				
132	247	245	7.347	7.323	34.386	26.890	35.828	44.372	260	33.	5.7	1.37	19.0				
133	297	295	7.245	7.217	34.417	26.929	35.872	44.420	247	47.	6.9	1.47	20.5				
134	336	334	6.797	6.766	34.395	26.974	35.938	44.506	243	54.	8.1	1.55	22.3				
135	380	377	6.063	6.030	34.344	27.031	36.030	44.632	244	58.	9.9	1.67	24.2				
136	450	446	5.129	5.093	34.271	27.087	36.134	44.779	249	60.	12.9	1.80	26.1				
137	521	517	4.404	4.365	34.226	27.132	36.216	44.897	257	58.	15.5	1.88	27.2				
138	581	576	4.010	3.968	34.210	27.161	36.266	44.966	257	61.	18.1	1.94	28.0				
139	652	646	3.695	3.649	34.208	27.192	36.313	45.028	254	66.	20.9	1.98	28.8				
140	716	710	3.524	3.474	34.213	27.213	36.343	45.067	251	71.	23.5	2.02	29.4				
141	814	807	3.303	3.247	34.225	27.244	36.386	45.121	246	78.	27.1	2.08	30.1				
142	939	930	2.985	2.922	34.277	27.315	36.474	45.224	227	99.	36.8	2.18	31.8				
143	1090	1080	2.831	2.758	34.348	27.386	36.553	45.310	210	117.	46.5	2.28	33.0				
144	1293	1280	2.723	2.635	34.470	27.495	36.666	45.428	192	136.	58.0	2.30	33.5				
145	1497	1481	2.680	2.576	34.560	27.572	36.744	45.508	186	142.	63.0	2.26	33.0				
146	1649	1631	2.647	2.531	34.644	27.643	36.817	45.581	189	139.	64.5	2.17	31.7				
147	1796	1776	2.621	2.493	34.694	27.686	36.861	45.627	195	134.	64.5	2.08	30.6				
148	1983	1960	2.539	2.395	34.758	27.745	36.925	45.694	206	123.	63.2	1.95	28.7				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 50 Latitude 42-40.4 S Longitude 1-20.4 E Date 10/30/83 Bottom Depth 3881 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	3	2	8.466	8.466	34.367	26.707	35.593	44.088	293	-7.							
212	4	4	8.450	8.450	34.357	26.701	35.588	44.084	298	-12.	2.9	1.05	12.5	518.	2065.	2272.	
213	40	39	8.459	8.455	34.362	26.704	35.591	44.087	295	-9.	2.7	1.03	12.5				
214	80	79	8.462	8.454	34.364	26.706	35.593	44.089	299	-13.	3.2	1.05	12.5				
215	119	118	8.337	8.325	34.364	26.726	35.619	44.119	292	-5.	3.3	1.07	12.8				
216	158	157	7.719	7.704	34.332	26.793	35.714	44.242	290	1.	3.5	1.17	14.5				
217	198	197	7.450	7.431	34.308	26.813	35.748	44.288	293	0.	3.8	1.20	15.3	559.	2077.	2271	
253	239	237	7.391	7.368	34.354	26.859	35.795	44.337	272	21.	5.0	1.32	17.7				
219	285	282	7.202	7.175	34.407	26.928	35.872	44.422	252	42.	7.0	1.47	20.4				
220	344	341	6.113	6.083	34.355	27.033	36.030	44.628	253	49.	8.9	1.59	22.4	709.	2114.	2271	
221	404	401	5.302	5.269	34.281	27.074	36.112	44.749	252	56.	12.2	1.79	25.7				
222	465	461	4.783	4.747	34.242	27.103	36.168	44.830	254	58.	13.9	1.84	26.5				
223	523	518	4.414	4.375	34.221	27.127	36.211	44.891	259	56.	15.4	1.88	26.9				
126	574	569	4.094	4.052	34.213	27.155	36.255	44.951	258	59.	17.8	1.92	27.7	817.	2140.	2275	
224	622	616	3.987	3.942	34.209	27.163	36.269	44.970	255	63.	18.4	1.94	27.9				
127	674	668	3.685	3.638	34.211	27.195	36.317	45.033	256	64.	21.8	1.99	28.8				
128	749	742	3.408	3.357	34.214	27.225	36.361	45.091	253	70.	25.1	2.05	29.6				
129	850	842	3.175	3.118	34.236	27.265	36.414	45.155	242	83.	29.6	2.14	30.6				
130	948	939	2.958	2.895	34.269	27.311	36.471	45.223	230	96.	36.1	2.22	31.8				
131	1048	1038	2.837	2.767	34.315	27.359	36.526	45.283	219	108.	42.6	2.29	32.7	1026.	2198.	2304	
132	1148	1137	2.783	2.706	34.373	27.411	36.580	45.339	204	124.	49.3	2.33	33.3				
133	1298	1284	2.721	2.633	34.457	27.484	36.656	45.418	191	137.	57.2	2.37	33.6				
134	1449	1433	2.694	2.594	34.515	27.534	36.707	45.470	186	142.	61.2	2.34	33.6				
135	1596	1579	2.672	2.560	34.591	27.598	36.771	45.535	186	142.	64.5	2.30	32.9	1106.	2226.	2324.	
136	1799	1778	2.651	2.522	34.669	27.663	36.838	45.602	189	139.	65.6	2.22	31.6				
137	2001	1978	2.614	2.468	34.726	27.714	36.890	45.656	196	133.	65.1	2.16	30.1				
138	2203	2175	2.529	2.366	34.766	27.754	36.935	45.706	204	125.	64.8	2.02	29.0				
139	2402	2372	2.430	2.250	34.783	27.777	36.964	45.741	210	120.	66.2	1.98	28.3				
140	2603	2568	2.323	2.126	34.794	27.797	36.990	45.773	213	118.	67.9	1.95	27.9				
141	2806	2768	2.216	2.002	34.798	27.810	37.010	45.799	217	115.	70.4	1.94	27.7				
142	3009	2966	2.078	1.847	34.801	27.824	37.033	45.830	221	113.	72.7	1.92	27.7				
143	3162	3116	1.955	1.712	34.796	27.831	37.047	45.851	220	115.	76.2	1.94	27.9	928.	2214.	2340.	
144	3313	3264	1.748	1.494	34.778	27.832	37.061	45.877	218	119.	84.5	1.98	28.7				
145	3466	3414	1.613	1.347	34.770	27.837	37.074	45.898	219	119.	88.7	2.01	29.1				
146	3618	3562	1.506	1.227	34.762	27.839	37.083	45.913	219	120.	92.9	2.02	29.5				
147	3767	3707	1.398	1.106	34.756	27.842	37.093	45.930	219	121.	96.8	2.05	29.8				
148	3948	3883	1.277	0.970	34.747	27.844	37.103	45.947	219	123.	101.4	2.10	30.2	977.	2232.	2352	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 51 Latitude 44- 0.6 S Longitude 1-21.2 E Date 10/31/83 Bottom Depth 4238 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	2	7.389	7.389	34.287	26.803	35.740	44.281	297	-4.							
212	3	3	7.397	7.397	34.284	26.799	35.736	44.277	298	-5.	3.6	1.16	15.0	551.	2071.	2267	
213	41	40	7.361	7.357	34.282	26.804	35.742	44.285	297	-4.	3.6	1.16	14.9				
214	80	79	7.361	7.353	34.281	26.803	35.741	44.285	297	-4.	3.5	1.16	14.9				
215	109	109	7.384	7.374	34.285	26.804	35.741	44.283	297	-4.	3.4	1.15	14.8	549.	2073.	2270	
216	144	143	7.394	7.380	34.288	26.805	35.742	44.284	298	-5.	3.5	1.16	14.8				
217	185	183	7.582	7.564	34.346	26.824	35.752	44.285	288	4.	3.6	1.16	14.6				
253	225	223	7.127	7.106	34.324	26.872	35.821	44.375	278	17.	3.4	1.28	17.0				
219	276	273	6.766	6.741	34.371	26.959	35.924	44.493	250	47.	7.9	1.54	21.5				
220	310	308	6.534	6.506	34.369	26.989	35.965	44.545	246	53.	8.4	1.59	22.7	715.	2118.	2274	
221	361	358	5.628	5.598	34.294	27.045	36.066	44.688	250	55.	10.6	1.72	24.6				
222	411	407	5.159	5.126	34.251	27.067	36.112	44.757	256	53.	11.6	1.76	25.3				
223	465	461	4.529	4.494	34.203	27.100	36.178	44.853	265	49.	13.2	1.84	26.2				
126	554	550	4.107	4.067	34.196	27.140	36.240	44.935	264	53.	16.0	1.90	27.2	799.	2135.	2274	
224	611	606	3.855	3.812	34.192	27.163	36.276	44.984	263	56.	18.5	1.96	27.9				
127	675	669	3.617	3.570	34.201	27.194	36.320	45.039	257	64.	21.8	2.01	28.6				
128	746	739	3.350	3.299	34.216	27.232	36.371	45.104	250	73.	25.8	2.07	29.6				
129	816	809	3.132	3.077	34.235	27.267	36.419	45.162	241	84.	30.6	2.14	30.6				
130	977	967	2.879	2.814	34.301	27.344	36.508	45.264	221	106.	40.9	2.26	32.4				
131	1057	1046	2.774	2.704	34.332	27.378	36.548	45.308	214	114.	45.6	2.32	32.8				
132	1156	1144	2.688	2.611	34.383	27.427	36.601	45.365	203	125.	51.8	2.35	33.5				
133	1307	1293	2.673	2.585	34.482	27.508	36.682	45.447	188	140.	60.2	2.36	33.7				
134	1458	1442	2.671	2.570	34.559	27.571	36.745	45.508	184	144.	63.6	2.32	33.1	1121.	2220.	2316	
135	1609	1591	2.650	2.537	34.629	27.630	36.804	45.568	184	144.	66.1	2.24	32.4				
136	1812	1791	2.633	2.503	34.703	27.692	36.867	45.632	192	136.	65.5	2.12	30.6				
137	2014	1990	2.576	2.429	34.750	27.736	36.914	45.682	201	128.	64.5	2.01	29.1				
138	2217	2189	2.468	2.305	34.778	27.769	36.953	45.727	207	123.	65.8	1.96	28.2				
139	2419	2388	2.352	2.172	34.797	27.795	36.986	45.767	215	116.	65.7	1.90	27.4				
140	2622	2587	2.247	2.050	34.808	27.814	37.011	45.798	220	112.	65.8	1.87	26.8				
141	2825	2785	2.188	1.973	34.812	27.823	37.025	45.815	222	111.	67.0	1.85	26.7				
142	3028	2984	2.113	1.879	34.812	27.831	37.037	45.833	223	110.	68.6	1.85	26.8				
143	3232	3183	1.978	1.727	34.802	27.834	37.050	45.853	222	113.	73.7	1.88	27.3				
144	3435	3382	1.819	1.551	34.789	27.837	37.063	45.875	221	115.	80 1	1.94	28.0				
145	3638	3581	1.663	1.378	34.774	27.838	37.073	45.895	219	119.	86.5	1.98	28.7				
146	3841	3778	1 459	1.158	34.757	27.839	37.087	45.921	218	122.	95.2	2.05	29.6				
147	4045	3977	1.237	0.920	34.739	27.841	37.103	45.950	216	126.	103.8	2.10	30.5	996.	2234.	2351	
148	4321	4246	1.063	0.721	34.725	27.843	37.116	45.974	217	127.	110.2	2.15	31.1	1000.	2235.	2352	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 52 Latitude 45- 1.2 S Longitude 1-19.9 E Date 10/31/83 Bottom Depth 4753 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	2	6.961	6.961	34.236	26.823	35.780	44.341	301	-5.							
211	3	3	6.911	6.911	34.228	26.823	35.783	44.346	302	-6.	4.7	1.27	16.2	569.	2084.	2275.	2081.
212	39	38	6.915	6.911	34.226	26.821	35.781	44.344	302	-6.	4.7	1.25	16.2				
213	79	78	6.903	6.896	34.229	26.826	35.786	44.350	301	-5.	4.5	1.25	16.2				
214	114	113	6.891	6.881	34.226	26.826	35.787	44.352	301	-4.	4.4	1.25	16.2				
215	144	142	6.711	6.698	34.217	26.843	35.813	44.386	300	-2.	4.6	1.29	16.6				
216	179	177	6.501	6.485	34.202	26.860	35.840	44.423	297	2.	5.0	1.34	17.3	588.	2087.	2272	
217	219	217	6.239	6.220	34.227	26.914	35.906	44.501	287	14.	6.1	1.45	19.2				
253	258	255	6.137	6.115	34.294	26.980	35.977	44.575	261	41.	7.9	1.59	22.2	693.	2109.	2269.	
219	318	316	5.383	5.357	34.257	27.045	36.079	44.712	260	47.	10.3	1.74	24.4				
221	378	375	4.749	4.720	34.214	27.084	36.150	44.814	264	48.	12.4	1.84	25.8				
222	439	435	4.422	4.389	34.202	27.110	36.194	44.874	264	51.	13.9	1.87	26.5				
223	499	494	4.044	4.008	34.196	27.146	36.249	44.947	263	55.	17.0	1.93	27.4	805.	2136.	2273.	2142.
126	575	570	3.871	3.830	34.197	27.165	36.277	44.984	261	58.	18.9	1.97	27.9				
224	650	644	3.568	3.523	34.202	27.199	36.327	45.049	258	63.	22.4	2.02	28.7	856.	2148.	2277.	
127	726	719	3.284	3.235	34.213	27.235	36.379	45.114	251	73.	26.5	2.08	29.7				
128	826	818	2.933	2.879	34.255	27.301	36.463	45.216	235	91.	35.1	2.21	31.3				
129	950	941	2.760	2.698	34.321	27.370	36.540	45.301	217	111.	44.0	2.31	32.7	1030.	2194.	2299	
130	1102	1091	2.648	2.576	34.393	27.438	36.614	45.380	201	128.	53.5	2.39	33.6				
131	1302	1288	2.663	2.575	34.514	27.535	36.709	45.473	185	143.	62.3	2.39	33.6	1121.	2224.	2320.	
132	1500	1484	2.588	2.485	34.592	27.605	36.782	45.550	183	146.	68.9	2.30	32.6	1109.	2232.	2330.	2231.
133	1702	1683	2.551	2.432	34.667	27.670	36.849	45.618	190	139.	71.4	2.19	30.8	1053.	2228.	2335.	
134	1904	1881	2.517	2.381	34.724	27.719	36.900	45.671	192	137.	70.3	2.15	30.5				
135	2103	2077	2.423	2.271	34.755	27.754	36.940	45.716	198	132.	71.5	2.08	29.6				
136	2303	2273	2.313	2.145	34.777	27.781	36.974	45.756	205	126.	71.8	2.01	28.7				
137	2506	2472	2.150	1.966	34.785	27.802	37.005	45.796	211	122.	74.6	1.99	28.2	962.	2219.	2340	
138	2708	2670	1.954	1.755	34.779	27.814	37.028	45.830	212	123.	80.6	2.00	28.7				
139	2910	2868	1.708	1.495	34.764	27.821	37.050	45.866	212	125.	87.9	2.06	29.3				
140	3111	3065	1.599	1.369	34.768	27.833	37.069	45.892	216	122.	89.2	2.04	29.1				
141	3313	3262	1.416	1.170	34.754	27.836	37.084	45.917	215	125.	95.9	2.08	29.8				
142	3518	3463	1.272	1.009	34.741	27.837	37.093	45.936	216	125.	101.1	2.14	30.3	992.	2236.	2354	
143	3725	3664	1.152	0.871	34.736	27.842	37.106	45.956	216	126.	105.2	2.15	30.6				
144	3927	3862	1.042	0.744	34.726	27.842	37.114	45.971	216	128.	108.8	2.19	31.1				
145	4129	4058	0.970	0.652	34.720	27.843	37.120	45.982	216	128.	111.3	2.20	31.2				
146	4330	4254	0.907	0.569	34.711	27.841	37.123	45.990	216	129.	115.2	2.23	31.7				
147	4587	4504	0.884	0.518	34.705	27.839	37.124	45.993	215	131.	118.1	2.24	31.9				
148	4841	4751	0.888	0.493	34.704	27.839	37.127	45.997	215	131.	119.0	2.24	32.0	1053.	2249.	2359.	2247.

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 53 Latitude 43-54.2 S Longitude 3- 6.4 E Date 11/ 1/83 Bottom Depth 4720 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	1	7.543	7.543	34.311	26.800	35.729	44.264	298	-6.							
211	4	4	7.589	7.589	34.313	26.795	35.722	44.255	300	-8.	3.7	1.13	14.7	546.	2078.	2277.	
212	41	41	7.547	7.543	34.312	26.801	35.729	44.265	300	-8.	3.7	1.14	14.7	545.	2083.	2283.	
213	72	71	7.441	7.434	34.305	26.811	35.745	44.284	300	-7.	3.6	1.15	14.8				
214	106	105	7.366	7.356	34.299	26.817	35.755	44.298	298	-5.	3.6	1.16	14.9				
215	140	139	7.175	7.162	34.281	26.830	35.777	44.329	296	-2.	3.7	1.19	15.4				
216	176	174	6.883	6.867	34.251	26.847	35.808	44.374	296	1.	3.9	1.24	16.0				
217	201	199	6.776	6.758	34.247	26.859	35.825	44.396	298	-1.	3.9	1.27	16.2				
253	240	238	6.727	6.705	34.253	26.871	35.839	44.412	293	5.	3.9	1.27	16.4				
219	281	279	7.036	7.010	34.381	26.930	35.883	44.440	255	40.	6.6	1.48	20.1				
221	321	319	6.353	6.325	34.345	26.994	35.979	44.567	250	50.	8.5	1.61	22.6				
222	362	359	5.980	5.949	34.331	27.031	36.035	44.640	245	58.	10.0	1.71	24.1				
223	412	409	5.228	5.195	34.265	27.070	36.112	44.753	253	55.	11.3	1.79	25.3				
126	463	459	4.683	4.648	34.223	27.099	36.169	44.836	259	54.	12.7	1.84	26.2				
224	511	507	4.365	4.327	34.207	27.121	36.208	44.890	263	52.	14.5	1.88	26.7				
127	563	558	4.087	4.046	34.198	27.144	36.245	44.941	263	54.	16.3	1.92	27.2				
128	628	623	3.860	3.815	34.199	27.168	36.281	44.988	259	60.	18.7	1.98	28.0				
129	704	698	3.605	3.556	34.207	27.200	36.326	45.046	253	68.	22.2	2.03	28.8				
130	804	797	3.220	3.166	34.227	27.253	36.400	45.139	245	79.	28.4	2.13	30.2				
131	905	896	2.987	2.927	34.261	27.302	36.461	45.211	232	94.	34.9	2.22	31.5				
132	1055	1045	2.816	2.746	34.347	27.386	36.554	45.312	209	118.	46.1	2.33	32.8				
133	1206	1194	2.738	2.657	34.427	27.458	36.629	45.391	194	134.	54.6	2.38	33.5				
134	1407	1393	2.695	2.593	34.524	27.541	36.713	45.476	185	143.	61.3	2.37	33.4				
135	1605	1587	2.663	2.550	34.615	27.618	36.791	45.555	184	144.	65.0	2.30	32.5				
136	1805	1785	2.641	2.512	34.685	27.677	36.852	45.616	189	139.	65.9	2.20	31.0				
137	2001	1977	2.598	2.452	34.732	27.720	36.897	45.664	197	132.	64.9	2.11	29.7				
138	2249	2221	2.472	2.306	34.774	27.766	36.950	45.724	206	124.	66.0	2.01	28.5				
139	2497	2464	2.338	2.151	34.789	27.791	36.983	45.764	212	119.	67.3	1.97	27.8				
140	2728	2691	2.207	2.001	34.796	27.808	37.009	45.798	215	117.	70.0	1.94	27.6				
141	2975	2932	1.995	1.769	34.787	27.819	37.032	45.834	216	118.	76.4	1.97	28.0				
142	3220	3173	1.720	1.476	34.770	27.827	37.057	45.874	215	122.	86.4	2.04	28.9				
143	3477	3424	1.516	1.251	34.761	27.836	37.079	45.908	216	123.	92.7	2.08	29.4				
144	3726	3666	1.341	1.055	34.752	27.843	37.096	45.936									
145	3979	3913	1.168	0.860	34.739	27.845	37.110	45.960	223	120.	102.0	2.12	30.2				
146	4214	4142	1.076	0.746	34.733	27.847	37.119	45.976	220	124.	106.1	2.14	30.5				
147	4456	4378	1.026	0.670	34.724	27.845	37.121	45.982	219	125.	109.6	2.16	31.0				
148	4672	4587	0.981	0.602	34.717	27.843	37.124	45.988	216	129.	112.8	2.19	31.4				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 54 Latitude 42-48.3 S Longitude 4-52.8 E Date 11/ 2/83 Bottom Depth 4524 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
125	2	2	8.165	8.165	34.319	26.715	35.615	44.124									
212	3	3	8.164	8.164	34.320	26.716	35.616	44.125	298	-10.	3.5	1.13	14.0	528.	2071.	2275.	2073
213	39	39	8.138	8.134	34.321	26.721	35.623	44.132	298	-10.	3.5	1.13	14.0				
214	64	63	8.073	8.067	34.317	26.728	35.633	44.145	298	-10.	3.5	1.14	14.1				
215	89	88	8.002	7.993	34.311	26.734	35.642	44.158	298	-9.	3.6	1.15	14.3				
216	118	117	7.701	7.690	34.296	26.767	35.689	44.218	296	-5.	3.7	1.22	15.1	547.	2078.	2276.	
217	148	147	7.626	7.612	34.310	26.789	35.715	44.247	291	0.	3.8	1.26	15.5				
253	178	177	7.075	7.058	34.281	26.845	35.797	44.353	292	3.	3.9	1.33	16.6				
219	218	216	6.789	6.769	34.262	26.869	35.835	44.404	289	8.	4.7	1.38	17.5	590.	2086.	2271.	
220	248	246	6.815	6.792	34.308	26.902	35.866	44.434	271	26.	5.9	1.49	19.4				
221	279	276	7.212	7.186	34.430	26.944	35.888	44.437	243	51.	7.5	1.57	21.1	684.	2116.	2279	
222	319	316	6.513	6.484	34.382	27.002	35.979	44.560	240	59.	9.4	1.70	23.4	737.	2129.	2280.	2128.
223	359	356	5.820	5.790	34.322	27.043	36.055	44.668	245	59.	10.9	1.79	24.7				
126	421	418	5.235	5.201	34.271	27.074	36.116	44.756	250	58.	12.0	1.85	25.7				
224	479	475	4.715	4.678	34.239	27.108	36.176	44.842	255	57.	13.8	1.89	26.6	799.	2139.	2277	
127	562	557	4.115	4.074	34.210	27.150	36.250	44.944	260	57.	17.0	1.95	27.4	817.	2139.	2274.	2142.
128	652	647	3.695	3.649	34.204	27.188	36.310	45.025	257	63.	20.7	2.00	28.5	841.	2151.	2282.	
129	753	746	3.354	3.303	34.216	27.231	36.371	45 103	250	73	25.5	2 08	29.6				
130	853	846	3.117	3.060	34.242	27.275	36.427	45.171	239	86.	31.0	2.13	30.7				
131	1004	995	2.820	2.754	34.314	27.359	36.527	45.285	218	109.	42.0	2.27	32.5	1026.			
132	1155	1144	2.751	2.674	34.409	27.442	36.613	45.373	198	130.	52.7	2.34	33.3				
133	1306	1293	2.710	2.621	34.490	27.512	36.683	45.446	188	140.	59.0	2.35	33.5	1114.	2223.	2319.	
134	1507	1491	2.677	2.572	34.586	27.593	36.765	45.529	184	144.	64.2	2.29	32.7	1118.	2222.	2318.	2229.
135	1708	1689	2.660	2.539	34.659	27.654	36.827	45.591	188	140.	65.6	2.17	31.6	1070.	2223.	2326	
136	1906	1884	2.617	2.479	34.710	27.700	36.875	45.641	193	136.	66.5	2.11	30.4				
137	2103	2077	2.571	2.416	34.752	27.739	36.917	45.686	200	129.	65.7	2.01	29.2				
138	2300	2271	2.475	2.304	34.775	27.767	36.951	45.725	207	123.	66.8	1.97	28.4				
139	2499	2466	2.371	2.183	34.792	27.790	36.981	45.760	211	120.	66.9	1.93	27.9	948.	2213.	2335	
140	2697	2660	2.221	2.017	34.796	27.807	37.006	45.795	215	117.	70.5	1.91	27.8				
141	2897	2856	2.103	1.863	34.795	27.817	37.024	45.819	217	116.	73.3	1.90	27.7	930.	2211.	2336.	2216.
142	3101	3056	1.977	1.739	34.796	27.829	37.043	45.846	220	115.	75.9	1.90	27.7				
143	3300	3251	1.876	1.620	34.799	27.840	37.061	45.870	222	114.	77.2	1.90	27.5	914.	2215.	2343	
144	3502	3449	1.677	1.406	34.779	27.840	37.073	45.894	220	118.	86.0	1.96	28.4				
145	3706	3647	1.539	1.250	34.772	27.845	37.088	45.917	221	118.	89.6	1.98	28.8	936.	2229.	2355	
146	3912	3848	1.346	1.040	34.759	27.849	37.104	45.944			96.2	2.02	29.4				
147	4110	4041	1.206	0.883	34.747	27.850	37.114	45.963	221	121.	101.3	2.06	30.0	974.	2236.	2357	
148	4625	4542	1.056	0.680	34.732	27.851	37.126	45.986	221	123	108 2	2 13	30 7	981	2242	2362	2238.

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 55 Latitude 41-41.8 S Longitude 6-38.0 E Date 11/ 2/83 Bottom Depth 4907 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	1	9.725	9.725	34.337	26.481	35.313	43.757	290	-12							
212	3	3	9.563	9.563	34.323	26.497	35.336	43.787	291	-12.	3.1	0.93	11.0	489.	2058.	2277.	
213	21	21	9.574	9.572	34.325	26.497	35.336	43.786	291	-12	3.0	0.93	11.0	486.	2058.	2278	
214	50	50	8.993	8.988	34.286	26.561	35.426	43.901	293	-10.	3.4	1.00	12.4				
215	89	88	8.539	8.530	34.276	26.625	35.510	44.004	296	-11.	3.5	1.04	12.9				
216	118	117	7.967	7.955	34.258	26.698	35.609	44.127	291	-2.	3.6	1.11	14.2				
217	158	157	7.741	7.726	34.269	26.740	35.662	44.189	285	6.	4.2	1.18	15.5				
253	208	206	7.435	7.415	34.310	26.817	35.752	44.293	273	20.	5.4	1.30	17.6				
219	263	261	7.151	7.126	34.410	26.937	35.884	44.435	245	49.	8.5	1.50	21.0				
220	316	314	6.285	6.257	34.367	27.020	36.008	44.599	240	61.	10.5	1.64	23.5				
221	376	373	5.354	5.323	34.282	27.068	36.104	44.738	246	61.	13.1	1.79	25.7				
222	433	430	4.748	4.715	34.240	27.105	36.171	44.835	251	61.	14.7	1.87	26.8				
223	492	488	4.396	4.359	34.217	27.126	36.210	44.891	253	62.	16.2	1.90	27.3				
126	555	551	3.954	3.914	34.200	27.159	36.266	44.969	258	60.	18.7	1.96	28.0				
224	611	606	3.715	3.672	34.198	27.181	36.302	45.016	257	63.	21.0	1.99	28.6				
127	675	669	3.449	3.403	34.210	27.217	36.351	45.079	250	72.	24.9	2.05	29.4				
128	744	737	3.210	3.160	34.217	27.245	36.393	45.132	245	79.	28.4	2.11	30.2				
129	840	832	3.049	2.993	34.261	27.296	36.451	45.198	230	96.	35.5	2.19	31.5				
130	984	975	2.881	2.816	34.334	27.370	36.534	45.289	210	117.	45.6	2.30	32.8				
131	1185	1173	2.728	2.648	34.459	27.484	36.655	45.417	190	138.	58.9	2.36	33.8				
132	1390	1376	2.689	2.594	34.558	27.569	36.740	45.503	182	146.	64.8	2.32	33.3				
133	1593	1576	2.658	2.546	34.646	27.643	36.816	45.580	184	144.	67.0	2.24	32.0				
134	1800	1779	2.617	2.488	34.715	27.703	36.878	45.644	193	136.	66.5	2.11	30.3				
135	2008	1984	2.624	2.477	34.773	27.750	36.925	45.690	205	124.	61.8	1.97	28.4				
136	2211	2184	2.573	2.408	34.805	27.782	36.960	45.728	213	116.	59.1	1.89	27.1				
137	2413	2383	2.482	2.300	34.819	27.802	36.986	45.759	220	110.	59.3	1.85	26.4				
138	2617	2582	2.384	2.185	34.827	27.818	37.008	45.787	224	107.	60.3	1.81	26.0				
139	2820	2781	2.337	2.119	34.836	27.831	37.024	45.806	229	102.	59.6	1.77	25.5				
140	3073	3029	2.232	1.991	34.839	27.843	37.044	45.833	231	101.	62.4	1.77	25.3				
141	3328	3279	2.061	1.798	34.824	27.847	37.058	45.857	229	105.	67.7	1.81	26.0				
142	3584	3529	1.766	1.484	34.798	27.849	37.078	45.895	225	112.	78.9	1.92	27.4				
143	3840	3779	1.447	1.146	34.767	27.848	37.097	45.931	222	118.	91.6	2.00	28.9				
144	4099	4031	1.198	0.877	34.746	27.849	37.114	45.963									
145	4354	4279	1.077	0.731	34.734	27.849	37.122	45.979	222	122.	105.6	2.12	30.4				
146	4560	4479	1.035	0.667	34.729	27.849	37.125	45.986	222	122.	108.0	2.15	30.8				
147	4766	4680	1.037	0.646	34.728	27.849	37.127	45.989	222	122.	108.6	2.14	30.8				
148	4982	4889	1.059	0.642	34.728	27.850	37.128	45.990	220	125.	108.7	2.15	30.8				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 56 Latitude 40-35.6 S Longitude 8-19.0 E Date 11/ 3/83 Bottom Depth 4970 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	3	2	10.735	10.735	34.440	26.387	35.175	43.578	285	-13							
212	3	2	10.771	10.771	34.442	26.383	35.169	43.570	285	-14.	2.0	0.77	8.3	453.	2056.	2291.	2051.
213	21	21	10.733	10.730	34.440	26.388	35.176	43.579	285	-13.	1.9	0.77	8.2				
214	52	51	10.371	10.365	34.429	26.444	35.247	43.665	285	-11.	1.9	0.78	8.3				
215	91	90	9.889	9.879	34.429	26.527	35.351	43.787	281	-4.	1.9	0.86	9.6				
216	121	120	9.656	9.642	34.427	26.565	35.399	43.845	280	-2.	2.0	0.89	10.0	493.	2065.	2282.	
217	161	160	9.298	9.280	34.410	26.611	35.461	43.922	273	7.	2.4	0.98	12.2				
253	211	209	9.110	9.087	34.480	26.697	35.555	44.022	261	21.	3.5	1.09	14.4				
219	266	264	8.826	8.797	34.545	26.794	35.663	44.142	243	40.	5.2	1.22	16.7	608.	2102.	2285	
220	322	319	8.175	8.142	34.526	26.881	35.779	44.286	233	54.	7.5	1.39	19.6				
221	381	378	7.265	7.228	34.450	26.954	35.895	44.442	229	65.	9.3	1.54	22.3	721.	2126.	2281.	
222	441	438	6.229	6.190	34.372	27.032	36.024	44.618	230	71.	11.5	1.72	24.9				
223	502	498	5.431	5.389	34.303	27.077	36.109	44.740			12.9	1.81	26.1				
126	563	559	4.862	4.818	34.263	27.112	36.172	44.831	243	68.	15.3	1.88	27.1	822.	2143.	2277.	
224	621	616	4.257	4.211	34.225	27.148	36.240	44.928	253	63.	17.4	1.94	27.8				
127	683	677	3.839	3.790	34.201	27.172	36.286	44.995	256	63.	19.3	1.97	28.3	839.	2151.	2283	
128	753	747	3.506	3.454	34.203	27.207	36.338	45.063	253	69.	23.0	2.02	29.0				
129	854	846	3.216	3.158	34.231	27.257	36.404	45.143	240	84.	29.5	2.12	30.5				
130	1005	996	3.007	2.939	34.313	27.342	36.500	45.249	216	110.	41.3	2.25	32.3	1019.	2196.	2302	
131	1206	1195	2.851	2.769	34.453	27.469	36.634	45.389	189	138.	56.9	2.34	33.6				
132	1408	1394	2.728	2.631	34.559	27.566	36.736	45.497	181	147.	64.2	2.32	33.2	1119.	2235.	2332.	
133	1609	1592	2.707	2.593	34.654	27.645	36.816	45.577	186	142.	65.4	2.21	31.7				
134	1812	1791	2.677	2.546	34.727	27.708	36.879	45.642	195	133.	62.8	2.06	29.8				
135	2013	1989	2.639	2.491	34.775	27.751	36.925	45.689	206	122.	59.9	1.95	28.2				
136	2214	2187	2.581	2.416	34.804	27.780	36.958	45.726	215	114.	58.0	1.87	26.9				
137	2415	2384	2.526	2.343	34.824	27.803	36.984	45.755	221	109.	56.5	1.81	26.2	890.	2209.	2340.	
138	2667	2632	2.430	2.225	34.835	27.821	37.009	45.786	226	104.	56.8	1.77	25.8				
139	2924	2883	2.338	2.110	34.838	27.833	37.027	45.810	231	100.	58.4	1.76	25.4				
140	3179	3133	2.231	1.979	34.836	27.842	37.043	45.833	231	102.	61.7	1.77	25.6	856.	2212.	2351	
141	3381	3331	2.112	1.842	34.827	27.846	37.054	45.851	231	103.	65.6	1.79	25.9				
142	3633	3577	1.877	1.587	34.806	27.848	37.071	45.882	226	110.	75.2	1.88	27.1				
143	3885	3823	1.556	1.247	34.777	27.849	37.092	45.921	224	115.	87.5	1.97	28.5				
144	4140	4072	1.293	0.964	34.755	27.851	37.110	45.954	223	119.	96.8	2.05	29.5				
145	4398	4322	1.143	0.790	34.740	27.850	37.119	45.973			103.7	2.12	30.2				
146	4657	4574	1.015	0.637	34.727	27.849	37.127	45.990	222	123.	108.9	2.13	30.8	990.	2251.	2371	
147	4913	4823	0.992	0.585	34.723	27.849	37.131	45.996	222	123.	110.7	2.16	31.0				
148	5049	4955	0.998	0.575	34.723	27.850	37.132	45.998	222	123.	110.7	2.16	31.1	981.	2253.	2375.	2245.

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 57 Latitude 39-29.8 S Longitude 10- 0.5 E Date 11/ 3/83 Bottom Depth 4837 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
225	2	1	10.968	10.968	34.444	26.349	35.127	43.521	283	-13.	2.0	0.75	8.2	457.	2041.	2272.	
226	78	77	10.286	10.277	34.445	26.471	35.278	43.699	282	-8.	2.0	0.79	8.8	467.	2051.	2278.	
227	147	146	9.613	9.597	34.443	26.585	35.421	43.869	277	1.	2.4	0.90	10.4				
228	215	213	8.699	8.676	34.332	26.646	35.524	44.011	281	3.	2.6	1.04	12.9				
229	247	246	8.724	8.698	34.385	26.685	35.560	44.046	272	12.	2.9	1.08	14.0				
230	311	309	8.538	8.505	34.496	26.802	35.684	44.176	250	35.	4.7	1.22	16.8				
231	399	396	7.669	7.629	34.470	26.912	35.835	44.364	235	56.	8.1	1.47	20.6				
232	497	493	6.426	6.381	34.395	27.026	36.008	44.593	227	73.	12.5	1.71	24.8				
233	598	594	4.799	4.752	34.255	27.113	36.177	44.839	247	65.	14.9	1.87	27.1				
234	750	744	3.975	3.920	34.253	27.200	36.307	45.009	243	75.	23.4	1.99	28.9				
235	929	921	3.255	3.191	34.281	27.294	36.438	45.175	227	97.	34.8	2.17	31.4				
236	1169	1157	2.949	2.869	34.433	27.444	36.604	45.354	192	134.	53.7	2.33	33.6				
237	1480	1465	2.756	2.652	34.610	27.605	36.773	45.532	181	146.	64.6	2.28	32.7				
238	1779	1759	2.693	2.565	34.720	27.700	36.871	45.633	193	135.	62.9	2.08	30.3				
239	2080	2055	2.640	2.486	34.795	27.767	36.941	45.706	210	118.	57.7	1.90	27.5				
240	2374	2344	2.520	2.341	34.815	27.796	36.977	45.748	218	112.	58.4	1.83	26.8				
241	2665	2630	2.427	2.222	34.837	27.823	37.011	45.788	225	105.	56.9	1.76	25.6				
242	2964	2924	2.297	2.066	34.841	27.839	37.035	45.820	229	103.	59.3	1.75	25.6				
243	3267	3220	2.171	1.912	34.838	27.849	37.054	45.847	229	104.	63.2	1.77	25.8				
244	3574	3520	1.871	1.587	34.809	27.851	37.074	45.884	227	109.	74.6	1.87	27.1				
245	3885	3823	1.461	1.155	34.772	27.852	37.100	45.933	223	117.	90.1	2.00	28.9				
246	4195	4126	1.178	0.847	34.746	27.851	37.117	45.968	222	121.	101.5	2.09	30.2				
247	4504	4426	1.039	0.678	34.733	27.852	37.128	45.988	221	123.	106.6	2.14	30.7				
248	4904	4815	0.948	0.544	34.723	27.852	37.135	46.003	222	123.	111.0	2.18	31.1				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 58 Latitude 38-30.5 S Longitude 11-49.7 E Date 11/ 4/83 Bottom Depth 5220 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
125	4	3	13.976	13.975	35.107	26.276	34.927	43.203	267	-14.	2.3	0.44	2.9	381.	2047.	2324.	2036
126	59	58	13.940	13.932	35.246	26.392	35.044	43.319	263	-10.	3.2	0.47	3.3				
127	145	144	12.278	12.259	35.033	26.566	35.284	43.621	247	15.	3.7	0.74	8.2	450.	2061.	2302.	
128	243	241	10.060	10.032	34.785	26.779	35.591	44.017	217	58.	7.5	1.22	16.4	605.	2101.	2286	
129	343	341	8.353	8.317	34.645	26.947	35.836	44.334	199	87.	14.9	1.60	22.1				
130	443	439	6.692	6.651	34.490	27.065	36.033	44.604	207	91.	19.0	1.80	25.5				
131	551	547	5.233	5.188	34.373	27.156	36.197	44.836	221	87.	23.7	1.96	27.9				
132	693	687	3.735	3.686	34.287	27.251	36.369	45.082	229	91.	30.0	2.12	30.2	914.	2164.	2284	
133	853	845	3.747	3.685	34.415	27.353	36.469	45.180	193	127.	46.3	2.29	32.3	1032.	2194.	2299	
134	1056	1046	3.278	3.204	34.523	27.486	36.625	45.358	176	147.	60.7	2.38	33.3	1103.	2221.	2319.	2222
135	1257	1245	2.947	2.859	34.606	27.583	36.740	45.489	176	150.	66.5	2.34	32.8	1103.	2226.	2325	
201	1490	1475	2.771	2.666	34.701	27.677	36.842	45.599	192	135							
224	1492	1477	2.769	2.664	34.702	27.677	36.843	45.600	189	138.							
136	1509	1493	2.782	2.676	34.700	27.675	36.840	45.596	189	138.	63.7	2.16	30.7	1032.	2219	2328	
137	1761	1742	2.720	2.593	34.781	27.747	36.915	45.674	206	122.	56.8	1.95	27.9				
138	2014	1991	2.649	2.501	34.818	27.784	36.957	45.720	217	111.	53.9	1.85	26.4				
139	2266	2238	2.558	2.389	34.835	27.808	36.986	45.755	222	107.	54.8	1.81	25.8	876.	2194.	2327	
140	2520	2488	2.444	2.253	34.839	27.822	37.008	45.784	227	103.	56.0	1.78	25.5				
141	2824	2786	2.349	2.130	34.843	27.835	37.028	45.810	230	101.	57.9	1.78	25.1				
142	3128	3084	2.256	2.009	34.843	27.845	37.044	45.832	231	101.	60.1	1.77	25.1	844.	2201.	2341	
143	3433	3382	2.082	1.808	34.828	27.849	37.059	45.858	230	104.	66.6	1.82	26.0				
144	3790	3731	1.676	1.374	34.789	27.850	37.085	45.907	224	114.							
145	4148	4080	1.240	0.912	34.750	27.850	37.112	45.960	222	120.	99.8	2.12	29.8				
146	4508	4430	1.103	0.739	34.734	27.849	37.121	45.978	220	124.	106.1	2.17	30.4				
147	4866	4778	1.060	0.656	34.728	27.849	37.126	45.987	220	124.	109.2	2.20	30.8	985.	2233.	2352	
148	5204	5106	1.010	0.568	34.722	27.849	37.132	45.998	221	124.	111.7	2.20	31.0	993.	2234.	2352.	2245.

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 1 Station 59 Latitude 37-13.7 S Longitude 13-45.5 E Date 11/ 5/83 Bottom Depth 4641 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	1	14.600	14.600	35.121	26.153	34.782	43.036	264	-15.	2.1	0.41	2.3	379.	2039.	2316	
126	111	110	12.594	12.579	34.982	26.463	35.170	43.496	260	0.	2.6	0.60	5.3	423.	2058.	2312.	
127	209	207	11.863	11.836	34.912	26.552	35.289	43.644	248	16.	3.1	0.76	8.6				
128	307	304	10.786	10.748	34.855	26.708	35.490	43.886	227	44.	4.2	1.01	13.4				
129	406	403	9.091	9.046	34.669	26.852	35.708	44.175	219	62.	7.9	1.35	18.8				
130	506	503	7.621	7.571	34.565	26.996	35.920	44.450	207	84.	15.8	1.64	23.5				
131	606	602	5.838	5.785	34.394	27.101	36.112	44.723	220	84.	18.8	1.86	26.6				
132	707	701	4.821	4.765	34.323	27.166	36.228	44.888	230	82.	22.7	1.95	28.3				
133	782	775	4.766	4.704	34.394	27.229	36.293	44.955	208	104.	32.3	2.07	29.6				
134	868	860	3.738	3.675	34.315	27.274	36.392	45.105	221	99.	33.5	2.14	30.8				
135	1007	998	3.396	3.325	34.382	27.362	36.497	45.226	203	120.	44.7	2.25	32.4				
136	1255	1243	2.987	2.899	34.514	27.506	36.663	45.411	183	143.	59.4	2.32	33.3				
137	1505	1490	2.782	2.676	34.648	27.633	36.799	45.556	185	142.	64.1	2.21	31.8				
138	1706	1687	2.769	2.646	34.730	27.701	36.868	45.625	196	131.	60.1	2.04	29.6				
139	2009	1987	2.712	2.563	34.806	27.769	36.939	45.699	215	113.	53.9	1.86	26.9				
140	2311	2283	2.576	2.402	34.830	27.802	36.980	45.748	223	106.	54.1	1.79	25.9				
141	2610	2576	2.428	2.229	34.836	27.822	37.009	45.786	227	103.	56.2	1.79	25.4				
142	2917	2877	2.343	2.115	34.849	27.841	37.035	45.817	232	99.	56.4	1.76	24.9				
143	3221	3175	2.236	1.980	34.846	27.850	37.051	45.840	232	101.	58.9	1.74	24.9				
144	3527	3475	2.027	1.744	34.827	27.853	37.067	45.869	230	105.	67.5	1.82	26.0				
145	3833	3773	1.572	1.269	34.782	27.852	37.093	45.921	224	115.	86.4	1.99	28.2				
146	4139	4071	1.255	0.928	34.755	27.853	37.115	45.961	222	120.	99.1	2.09	29.6				
147	4449	4374	1.129	0.771	34.739	27.851	37.121	45.976	219	124.	104.9	2.15	30.3				
148	4604	4525	1.103	0.728	34.737	27.852	37.125	45.982	223	121.	106.3	2.15	30.4				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 60 Latitude 34-22.2 S Longitude 17-31.6 E Date 1/11/84 Bottom Depth 1196 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
108	1	1	20.695	20.695	35.519	24.973	33.396	41.457						295.	2005.	2340	
109	2	2	20.695	20.695	35.517	24.972	33.395	41.455	232	-10	1 4	0 10	0.0				
102	2	2	20.655	20.655	35.525	24.989	33.413	41.474	230	-8.	1.4	0.10	0.0	295.	2015.	2352	
110	23	23	20.679	20.675	35.523	24.982	33.405	41.466	230	-8	1.4	0.09	0.0				
111	50	50	18.592	18.583	35.392	25.428	33 917	42.041	230	1.	1.8	0.21	0.4				
112	75	75	15.505	15.493	35.366	26.145	34.738	42.959	207	38	5.2	0.59	6.5				
113	100	99	13.820	13.806	35.238	26.413	35.069	43.348	217	36	5.4	0.67	8.2				
114	149	149	12.463	12.443	35.091	26.575	35.285	43.615	221	40.	5.7	0.82	10.6				
115	199	198	11.327	11.302	34.940	26.674	35.432	43.806									
116	250	248	10.486	10.456	34.865	26.768	35.561	43.969	217	55.	8.0	1.08	15.4				
117	300	298	9.359	9.326	34.742	26.864	35.707	44.161	210	70.	10 7	1 29	18 9				
138	400	398	7.652	7.612	34.591	27.010	35.932	44.460	203	88.	17.7	1.57	23.9				
119	501	497	5.899	5.856	34.440	27.128	36.135	44.743	209	94.	24.1	1.82	27.6				
120	701	696	4.019	3.968	34.325	27.253	36.356	45.054	221	97.	31.8	2.00	30.5				
121	801	794	3.522	3.466	34.342	27.316	36.445	45.167	212	110	39 4	2 10	32 1				
122	899	892	3.666	3.601	34.420	27.365	36.486	45.200									
123	1046	1037	3.390	3.315	34.483	27.443	36.578	45.305									
124	1198	1187	3.046	2.962	34.563	27.540	36.692	45.436	179	146.	62.2	2.22	33 1				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 61 Latitude 34-41.2 S Longitude 17- 7.3 E Date 1/12/84 Bottom Depth 2648 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
101	-9	-9	21.216		35.569												
102	24	24	21.216	21.211	35.568	24.870	33.277	41.323	227	-7.	1.4	0.07	0.0	294.	2013.	2351.	
103	49	49	18.019	18.011	35.371	25.555	34.063	42.204	226	7.	2.1	0.24	0.9	349.	2043.	2342.	
104	90	89	14.280	14.267	35.272	26.342	34.980	43.243	209	42.	5.4	0.66	8.2				
105	140	139	12.930	12.911	35.142	26.521	35.213	43.525	210	48.	6.0	0.82	10.7				
106	191	190	11.962	11.937	35.046	26.637	35.368	43.717	207	57.	7.2	0.95	13.2				
107	293	291	9.424	9.391	34.751	26.860	35.700	44.152	207	72.	10.0	1.27	18.5				
108	393	390	7.922	7.882	34.616	26.990	35.899	44.415									
109	493	490	6.140	6.096	34.430	27.090	36.086	44.682	213	89.	18.6	1.74	26.3				
110	592	588	5.297	5.248	34.427	27.192	36.229	44.865									
111	692	686	4.501	4.448	34.409	27.269	36.346	45.019									
112	794	788	3.907	3.849	34.454	27.367	36.475	45.176	186	132.	49.6	2.18	32.5				
115	898	890	3.407	3.344	34.461	27.423	36.556	45.283	185	137.	53.8	2.19	32.9				
116	1100	1091	3.055	2.979	34.538	27.518	36.670	45.413	178	147.	62.7	2.23	33.3				
117	1302	1290	2.833	2.743	34.626	27.610	36.773	45.526	182	145.	64.7	2.14	32.2				
138	1503	1488	2.777	2.671	34.696	27.672	36.838	45.594	190	137.	62.0	2.02	30.4				
119	1701	1683	2.759	2.637	34.773	27.737	36.903	45.660	204	123.	56.4	1.86	28.1				
120	1900	1879	2.827	2.686	34.836	27.783	36.945	45.699	220	107.	47.3	1.68	25.5				
121	2101	2077	2.752	2.594	34.853	27.804	36.971	45.729	227	100.	46.1	1.63	24.8				
122	2309	2281	2.621	2.446	34.857	27.820	36.995	45.761	229	100.	48.0	1.61	24.5				
123	2515	2484	2.533	2.341	34.862	27.833	37.014	45.785	232	97.	50.6	1.59	24.3				
124	2677	2643	2.442	2.236	34.862	27.842	37.028	45.804	232	98.	52.8	1.60	24.4				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 62 Latitude 35-36 0 S Longitude 15-59 9 E Date 1/12/84 Bottom Depth 4505 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
101	3	3	18.991	18.990	35.300	25.254	33.732	41.844	243	-14.	1.6	0.15	0.0	316.	2019.	2337.	2006.
102	54	54	15.472	15.464	35.325	26.120	34.715	42.937	234	11.	2.9	0.37	2.9	390.	2061.	2337.	
103	103	102	14.154	14.139	35.232	26.338	34.982	43.250	231	21.	3.9	0.51	5.7				
104	152	151	13.619	13.597	35.219	26.441	35.105	43.392	234	20.	4.1	0.56	6.3	432.	2075.	2328.	
105	200	199	12.909	12.882	35.104	26.498	35.191	43.505	229	29.	4.5	0.67	8.5				
106	300	298	11.842	11.803	35.018	26.641	35.378	43.732	221	43.	5.9	0.86	11.8	518.	2102.	2319.	
107	394	392	10.264	10.217	34.821	26.775	35.579	43.997	208	66.	6.8	1.08	15.5				
108	489	485	8.763	8.710	34.667	26.904	35.775	44.256	209	75.	11.1	1.35	20.0	684.	2132.	2298	
109	586	581	7.243	7.186	34.530	27.023	35.965	44.512	206	88.	16.3	1.59	23.9				
110	686	681	5.525	5.467	34.369	27.120	36.147	44.774	222	84.	19.5	1.77	26.8				
111	773	767	4.651	4.590	34.319	27.182	36.253	44.922	227	86.	24.5	1.87	28.4	871.	2166.	2293	
112	970	962	3.765	3.694	34.366	27.313	36.430	45.141	206	114.	40.9	2.06	31.3				
113	1215	1204	3.056	2.971	34.479	27.472	36.625	45.370	185	140.	58.0	2.18	33.0	1101.	2228.	2327.	
114	1449	1435	2.814	2.712	34.618	27.606	36.771	45.526	182	145.	65.6	2.11	32.1	1104.	2230.	2329	
115	1700	1682	2.796	2.673	34.728	27.697	36.862	45.618	194	133.	61.3	1.94	29.4	1013.	2212.	2323.	
116	1947	1925	2.776	2.632	34.799	27.758	36.924	45.681	210	117.	54.4	1.76	27.0	929.	2196.	2319.	2204.
117	2192	2167	2.648	2.484	34.822	27.789	36.963	45.727	218	110.	54.6	1.70	26.0				
118	2447	2417	2.533	2.347	34.837	27.813	36.993	45.764	225	104.	55.0	1.65	25.2	872.	2190.	2323.	2199.
119	2700	2665	2.401	2.193	34.839	27.827	37.016	45.795	226	105.	57.8	1.66	25.1				
120	2957	2917	2.322	2.091	34.847	27.842	37.036	45.820	231	101.	58.7	1.64	24.9	857.	2207.	2345.	2200.
121	3476	3425	2.048	1.770	34.828	27.852	37.065	45.865	228	106.	69.1	1.70	25.8	871.	2206.	2341.	2210.
122	3995	3932	1.300	0.987	34.757	27.851	37.109	45.952	221	120.	98.5	1.94	29.2	956.	2227.	2350.	2235.
123	4258	4188	1.120	0.784	34.740	27.851	37.120	45.975	219	124.	105.8	1.99	30.0	976.	2255.	2377.	
124	4575	4497	0.984	0.616	34.727	27.850	37.130	45.993	219	126.	111.8	2.05	30.7	990.	2252.	2372.	2244

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 63 Latitude 36-27.3 S Longitude 14-55.0 E Date 1/13/84 Bottom Depth 4848 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
160	1	1	19.057	19.057	35.424	25.332	33.806	41.915	241	-12.	3.5	0.15	0.0	308.			
102	51	51	15.151	15.143	34.985	25.930	34.540	42.777	246	1.	3.9	0.49	3.8				
103	102	101	13.685	13.671	35.158	26.379	35.041	43.327	238	16.	3.8	0.54	5.4				
104	152	151	12.774	12.753	35.020	26.458	35.157	43.477	240	19.	4.0	0.64	7.4	455.	2086.	2328	
105	202	200	12.406	12.379	35.012	26.526	35.240	43.573	226	35.	5.7	0.79	10.2				
106	301	299	11.218	11.180	34.952	26.706	35.468	43.847	212	56.	7.6	1.00	14.1	564.	2112.	2313	
107	401	398	8.980	8.936	34.609	26.823	35.685	44.157	236	46.	6.8	1.16	16.7				
108	502	498	8.206	8.154	34.648	26.975	35.871	44.375	202	85.	16.6	1.51	21.9	726.	2146.	2304	
153	703	697	5.150	5.092	34.348	27.148	36.193	44.838	220	89.	21.5	1.86	28.0	868.	2176	2305	
110	902	895	3.739	3.674	34.322	27.280	36.398	45.111	216	104.	34.9	2.05	30.8				
111	1102	1093	3.237	3.159	34.424	27.411	36.554	45.291	192	132.	51.7	2.19	32.8				
112	1354	1341	2.865	2.771	34.563	27.557	36.719	45.473	180	147.	63.9	2.19	32.8	1100.	2240.	2339	
113	1705	1687	2.747	2.625	34.730	27.703	36.871	45.629	196	131.	61.5	1.94	29.5				
114	2005	1982	2.677	2.529	34.801	27.768	36.940	45.702	211	117.	57.1	1.78	27.1	928.	2217.	2343.	
115	2305	2278	2.554	2.381	34.831	27.805	36.984	45.753	222	107.	55.2	1.69	25.7				
116	2607	2574	2.440	2.241	34.842	27.826	37.012	45.788	229	101.	56.0	1.66	25.1	857.	2208.	2346.	
117	2905	2867	2.332	2.106	34.845	27.839	37.033	45.816	230	101.	58.2	1.65	25.0				
118	3206	3161	2.225	1.971	34.845	27.850	37.051	45.841	232	101.	61.3	1.65	24.9	844.	2218.	2360	
119	3508	3456	2.003	1.723	34.824	27.852	37.068	45.871	229	106.	70.3	1.72	26.0				
120	3806	3747	1.627	1.325	34.787	27.852	37.090	45.915	224	114.	86.1	1.85	27.9				
121	4102	4036	1.297	0.972	34.757	27.852	37.110	45.954	221	120.	99.1	1.94	29.4				
122	4404	4331	1.145	0.792	34.741	27.851	37.120	45.974	219	124.	105.5	1.99	30.2	963.	2256.	2381	
123	4678	4597	1.107	0.724	34.736	27.851	37.124	45.982	221	123.	108.1	2.01	30.5	964			
124	4926	4837	1.079	0.667	34.731	27.851	37.127	45.988	220	124.	109.6	2.02	30.7	976			

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 64 Latitude 42-38.9 S Longitude 1-20.2 E Date 1/16/84 Bottom Depth 3831 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	3	3	11.318	11.318	34.291	26.166	34.932	43.315	285	-16.	0.8	0.87	9.7				
101	3	3	11.165	11.165	34.294	26.197	34.969	43.357	283	-14.	1.3	0.86	9.6	460.	2052.	2282.	2049.
232	23	22	10.529	10.526	34.301	26.316	35.114	43.527	291	-18.	0.6	0.86	9.3				
233	53	53	10.208	10.202	34.310	26.379	35.191	43.616	288	-13.	1.2	0.91	10.1				
234	84	83	9.357	9.348	34.291	26.507	35.356	43.816	283	-3.	2.2	1.08	11.9				
235	115	114	8.211	8.199	34.344	26.729	35.628	44.134	283	4.	4.2	1.17	14.2				
236	145	144	7.946	7.932	34.370	26.789	35.700	44.217	282	7.	4.2	1.17	15.3				
237	175	174	7.715	7.699	34.375	26.828	35.749	44.276	281	10.	4.6	1.22	16.2	584.	2097.	2286.	
238	215	214	7.488	7.467	34.377	26.862	35.794	44.331	267	25.	5.2	1.31	17.9				
239	255	253	7.199	7.173	34.378	26.905	35.850	44.400									
240	296	294	6.869	6.842	34.402	26.970	35.930	44.494	240	56.	8.1	1.55	22.3				
241	346	343	6.063	6.033	34.335	27.023	36.023	44.624	244	58.	9.7	1.67	24.1				
102	357	354	5.970	5.937	34.328	27.029	36.034	44.639	243	60.	10.7	1.67	24.1	760.	2135.	2281	
242	397	394	5.341	5.309	34.269	27.060	36.096	44.731	252	56.	10.9	1.74	25.2				
243	448	444	4.925	4.890	34.240	27.085	36.143	44.798	257	54.	12.0	1.79	25.9				
244	524	520	4.290	4.251	34.214	27.135	36.225	44.911	261	55.	13.7	1.84	26.6				
103	593	588	4.019	3.976	34.205	27.156	36.261	44.960	259	59.	18.0	1.90	27.3	827.	2146.	2279.	2144.
245	599	594	3.929	3.886	34.205	27.166	36.275	44.979	260	59.	17.3	1.90	27.8				
153	662	657	3.734	3.687	34.203	27.184	36.303	45.017	257	63.	20.9	1.95	27.9				
246	671	665	3.697	3.650	34.203	27.188	36.309	45.025	257	63.	19.8	1.94	28.4				
105	737	731	3.466	3.415	34.209	27.215	36.349	45.076	253	69.	24.4	2.00	28.7				
247	747	741	3.403	3.352	34.212	27.224	36.361	45.091	252	71.	24.0	1.99	29.4				
106	835	828	3.167	3.111	34.229	27.260	36.409	45.151	243	82.	30.2	2.08	29.9	920.	2179.	2299	
248	848	840	3.152	3.095	34.233	27.264	36.414	45.157	246	79.	29.4	2.06	30.4				
107	933	924	2.972	2.910	34.262	27.304	36.464	45.215	232	94.	36.1	2.16	31.0				
108	1026	1017	2.831	2.763	34.307	27.353	36.520	45.278	219	108.	42.4	2.23	32.1	1030.	2194.	2299	
109	1173	1162	2.708	2.630	34.380	27.423	36.596	45.360	203	125.	51.6	2.29	33.2				
110	1320	1306	2.692	2.602	34.457	27.487	36.660	45.424	189	139.	58.0	2.32	33.5	1126.	2216.	2310.	2219.
111	1467	1451	2.683	2.582	34.545	27.559	36.732	45.495	182	146.	64.1	2.31	33.2				
112	1615	1598	2.653	2.540	34.607	27.612	36.786	45.551	183	145.	65.9	2.26	32.5	1124.	2226.	2322	
113	1757	1737	2.652	2.527	34.660	27.656	36.830	45.594	186	142.	66.6	2.18	31.4				
114	1904	1882	2.628	2.490	34.706	27.696	36.871	45.636	191	138.	66.5	2.09	30.4	1049.	2222.	2329	
115	2105	2079	2.563	2.408	34.754	27.741	36.920	45.689	199	130.	66.7	1.99	29.2				
116	2255	2227	2.514	2.347	34.770	27.759	36.941	45.713	204	126.	66.8	1.96	28.7	988.	2222.	2338.	2217
117	2403	2372	2.453	2.273	34.786	27.778	36.964	45.739	209	121.	66.3	1.90	28.2				
118	2603	2569	2.325	2.128	34.797	27.799	36.992	45.775	214	117.	67.2	1.86	27.6	935.	2212.	2336.	2209.
119	2799	2761	2.186	1.973	34.803	27.816	37.018	45.808	218	115.	69.6	1.88	27.5	931.	2213.	2338.	2213.
120	3001	2959	2.008	1.779	34.792	27.822	37.035	45.836	216	118.	75.9	1.93	28.1				
121	3204	3157	1.794	1.550	34.781	27.831	37.056	45.869	216	120.	82.9	1.97	28.6	957.	2223.	2345.	2226.
122	3438	3386	1.604	1.341	34.766	27.834	37.071	45.896	216	122.	90.7	2.02	29.0	978.	2225.	2344.	2230.
123	3676	3618	1.435	1.152	34.755	27.838	37.087	45.921	216	124.	96.3	2.05	29.5				
124	3881	3818	1.319	1.019	34.748	27.842	37.098	45.940	215	126.	100.8	2.08	29.8	987.	2228.	2346.	2236.

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 65 Latitude 44- 0.2 S Longitude 1-23.2 E Date 1/16/84 Bottom Depth 4291 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
101	4	4	10.599	10.599	34.324	26.321	35.116	43.526	285	-12.	0.2	0.85	10.3	465.	2054.	2282.	
231	27	27	9.694	9.691	34.210	26.387	35.223	43.670	290	-12.	0.6	0.95	11.8				
232	58	57	9.337	9.331	34.221	26.455	35.306	43.767	289	-8.	0.6	0.98	11.9				
233	88	87	8.689	8.680	34.203	26.545	35.424	43.912	288	-3.	0.9	1.09	12.7				
234	118	117	8.673	8.661	34.382	26.688	35.566	44.052	279	5.	2.8	1.07	12.9				
235	148	147	8.209	8.194	34.387	26.764	35.662	44.168	276	11.	3.2	1.10	14.7				
236	178	176	8.041	8.023	34.408	26.806	35.712	44.224	270	18.	3.8	1.17	15.7				
237	218	216	7.833	7.811	34.430	26.854	35.769	44.291	257	33.	4.5	1.25	17.5				
238	258	256	7.081	7.057	34.349	26.898	35.849	44.405	262	33.	5.3	1.37	19.6				
239	298	296	6.185	6.159	34.251	26.941	35.936	44.532	273	29.	6.1	1.47	21.0				
240	350	347	5.755	5.726	34.268	27.009	36.024	44.641	260	45.	8.2	1.58	23.6				
241	400	397	5.203	5.171	34.240	27.053	36.096	44.739	259	50.	9.8	1.70	25.0				
242	451	447	4.810	4.775	34.217	27.080	36.144	44.805	262	50.	10.7	1.74	25.7				
243	528	524	4.357	4.318	34.200	27.116	36.204	44.887	262	53.	13.5	1.81	26.5				
102	553	549	4.273	4.232	34.210	27.134	36.225	44.912	259	57.	15.1	1.82	27.1				
244	604	599	4.100	4.056	34.211	27.153	36.253	44.949	258	59.	16.4	1.86	27.4				
103	653	647	3.919	3.872	34.214	27.174	36.284	44.988	253	66.	18.6	1.89	28.5				
245	680	674	3.744	3.696	34.210	27.188	36.307	45.021	255	65.	19.9	1.92	28.4				
153	754	747	3.518	3.466	34.216	27.216	36.347	45.071	250	72.	23.2	1.98	29.4				
246	755	748	3.471	3.419	34.216	27.220	36.354	45.080	249	73.	23.8	1.97	29.1				
105	854	846	3.206	3.148	34.237	27.262	36.410	45.150	242	82.	29.3	2.02	30.7				
248	857	849	3.168	3.110	34.241	27.269	36.419	45.160	241	84.	30.3	2.05	30.6				
106	954	945	2.962	2.898	34.274	27.315	36.475	45.227	228	98.	36.9	2.11	32.0				
107	1054	1044	2.843	2.773	34.324	27.366	36.532	45.289	215	112.	43.8	2.19	32.8				
108	1206	1194	2.739	2.658	34.414	27.448	36.619	45.380	197	131.	53.6	2.24	33.8				
109	1358	1344	2.689	2.596	34.500	27.522	36.695	45.458	186	142.	60.4	2.26	34.0				
110	1511	1494	2.670	2.565	34.575	27.584	36.758	45.522	183	145.	63.5	2.23	33.4				
111	1663	1645	2.657	2.540	34.638	27.637	36.811	45.575	183	145.	65.8	2.17	32.6				
112	1815	1794	2.612	2.482	34.688	27.682	36.858	45.624	186	143.	67.9	2.11	31.7				
113	1967	1944	2.604	2.461	34.735	27.721	36.898	45.664	195	134.	64.9	2.00	30.3				
114	2169	2142	2.531	2.371	34.763	27.751	36.932	45.703	201	128.	65.7	1.95	29.3				
115	2371	2340	2.422	2.245	34.786	27.780	36.967	45.744	206	124.	67.4	1.91	28.7				
116	2574	2540	2.301	2.108	34.791	27.796	36.990	45.774	209	123.	69.4	1.90	28.4				
117	2777	2738	2.105	1.896	34.787	27.809	37.016	45.810	210	123.	75.3	1.92	28.5				
118	3005	2962	1.944	1.716	34.783	27.820	37.036	45.840	212	123.	79.5	1.93	28.7				
119	3235	3186	1.777	1.531	34.778	27.830	37.057	45.871	214	123.	83.7	1.94	29.0				
120	3464	3411	1.563	1.298	34.767	27.838	37.078	45.904	216	123.	89.6	1.97	29.5				
121	3693	3634	1.354	1.071	34.745	27.836	37.089	45.927	212	129.	99.3	2.04	30.7				
122	3923	3858	1.248	0.944	34.743	27.843	37.103	45.948	216	126.	101.5	2.05	30.6				
123	4153	4082	1.099	0.775	34.734	27.846	37.117	45.971	216	127.	108.0	2.08	31.0				
124	4357	4281	1.021	0.677	34.727	27.847	37.123	45.983	216	128.	110.7	2.09	31.4				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 66 Latitude 45- 1 2 S Longitude 1-19 7 E Date 1/17/84 Bottom Depth 4704 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	3	3	9.623	9.623	34.142	26.346	35.185	43.635	289	-10.	0.1	0.98	12.0				
101	3	3	9.640	9.640	34.143	26.344	35.182	43.632	288	-9.	0.0	1.02	12.1	486.	2057.	2275.	2053
232	24	24	9.616	9.613	34.144	26.349	35.188	43.639	290	-11.	0.0	0.99	11.9				
233	54	54	9.339	9.333	34.194	26.434	35.285	43.746	290	-9.	0.0	0.99	11.7				
234	86	86	8.345	8.336	34.286	26.663	35.556	44.058	283	4.	0.0	1.16	13.5				
235	117	116	7.148	7.137	34.274	26.828	35.776	44.329	282	13.	1.8	1.28	16.9				
236	147	146	6.774	6.761	34.244	26.856	35.822	44.392	285	12.	4.1	1.32	17.9				
237	177	175	6.843	6.827	34.323	26.909	35.872	44.438	265	32.	5.1	1.40	19.4				
238	217	215	6.459	6.440	34.326	26.963	35.944	44.527	255	44.	6.6	1.52	21.6				
239	257	255	5.847	5.825	34.288	27.012	36.023	44.634	254	50.	8.0	1.63	23.5				
240	298	295	5.361	5.337	34.257	27.047	36.082	44.716	256	51.	9.0	1.69	24.5				
241	345	342	5.046	5.019	34.246	27.075	36.126	44.776	255	55.	10.8	1.76	25.5				
242	395	392	4.658	4.628	34.218	27.097	36.168	44.836	261	52.	11.9	1.79	26.0				
243	446	442	4.304	4.271	34.200	27.121	36.211	44.896	262	54.	13.7	1.84	26.7				
102	453	449	4.302	4.269	34.199	27.121	36.211	44.896	262	54.	13.7	1.83	26.7				
244	522	518	4.018	3.981	34.195	27.148	36.252	44.952	263	55.	15.8	1.89	27.4				
245	598	593	3.689	3.647	34.197	27.183	36.305	45.020	257	63.	19.4	1.95	28.4				
246	673	667	3.404	3.358	34.207	27.219	36.356	45.085	252	71.	23.5	2.02	29.2				
247	752	745	3.171	3.121	34.223	27.254	36.403	45.144	245	80.	28.0	2.08	30.2				
248	851	843	2.922	2.866	34.261	27.307	36.469	45.223	232	95.	35.3	2.16	31.6				
103	952	942	2.782	2.720	34.309	27.359	36.528	45.288	219	109.	42.3	2.22	32.7	1047.	2188.	2290	
153	1051	1041	2.709	2.640	34.364	27.409	36.582	45.345	206	122.	49.0	2.29	33.3				
105	1203	1190	2.591	2.511	34.427	27.471	36.649	45.418	194	135.	56.8	2.34	33.9				
106	1352	1338	2.567	2.476	34.506	27.537	36.716	45.486	184	145.	63.5	2.33	34.0	1150.	2221.	2313	
107	1501	1484	2.547	2.444	34.582	27.600	36.780	45.550	181	148.	66.9	2.29	33.6				
108	1649	1630	2.507	2.393	34.627	27.641	36.823	45.594	180	150.	69.8	2.27	33.6				
109	1798	1777	2.511	2.384	34.686	27.689	36.870	45.641	184	146.	69.7	2.17	32.1				
110	1952	1928	2.524	2.383	34.732	27.725	36.906	45.677	192	137.	68.3	2.07	30.6	1049.	2217.	2323	
111	2156	2129	2.485	2.327	34.771	27.761	36.944	45.717	201	129.	66.6	1.98	29.2	986.	2210.	2325.	
112	2362	2331	2.320	2.146	34.785	27.788	36.980	45.762	207	124.	69.5	1.94	28.6				
113	2570	2535	2.131	1.941	34.786	27.805	37.009	45.801	210	123.	74.2	1.94	28.7	969.	2221.	2341	
114	2772	2733	1.949	1.744	34.775	27.811	37.026	45.829									
115	2975	2932	1.768	1.547	34.768	27.820	37.047	45.860	210	126.	84.0	2.00	29.6	985.	2225.	2343.	
116	3202	3154	1.563	1.325	34.764	27.833	37.072	45.897	212	126.	89.8	2.04	30.1				
117	3428	3375	1.404	1.147	34.748	27.833	37.082	45.917	213	127.	93.8	2.09	30.6				
118	3655	3596	1.230	0.955	34.741	27.840	37.100	45.945	212	130.	100.2	2.12	31.3	1025.	2247.	2361	
119	3874	3810	1.116	0.821	34.732	27.842	37.109	45.962	216	127.	102.3	2.12	31.4	1011.	2245.	2361.	
120	4099	4029	1.003	0.687	34.721	27.841	37.117	45.977	215	129.	106.4	2.18	31.9				
121	4201	4128	1.012	0.685	34.727	27.846	37.122	45.982	217	127.	109.1	2.11	31.1	1015.	2243.	2358	
122	4303	4228	0.969	0.632	34.720	27.844	37.123	45.985									
123	4536	4455	0.917	0.556	34.711	27.841	37.125	45.992	215	130	115 0	2 19	31.8	1045.	2251	2363	
124	4791	4702	0.880	0.491	34.703	27.839	37.126	45.996	212	134.	117.7	2.21	32.1	1067.	2250.	2358.	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 67 Latitude 46- 1.1 S Longitude 1-17.5 E Date 1/17/84 Bottom Depth 4182 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
231	2	2	7.388	7.388	33.930	26.522	35.464	44.011	307	-13.	0.1	1.26	18.4				
101	3	3	7.403	7.403	33.927	26.518	35.459	44.005	306	-12.	0.0	1.29	18.3	550.	2082.	2278	
232	25	25	7.392	7.390	33.928	26.520	35.462	44.009	308	-14.	0.2	1.27	18.5				
233	56	55	6.765	6.760	33.949	26.624	35.595	44.169	313	-15.	0.2	1.32	18.8				
234	87	86	5.981	5.974	33.963	26.737	35.745	44.354	307	-4.	3.8	1.45	20.0				
235	118	117	4.673	4.664	33.998	26.919	35.991	44.661	311	2.	6.7	1.55	22.4				
236	147	146	4.246	4.236	34.022	26.984	36.078	44.768	311	5.	7.8	1.57	22.9				
237	178	176	4.201	4.188	34.066	27.024	36.119	44.811	306	11.	7.8	1.58	23.6				
238	217	215	3.883	3.868	34.086	27.073	36.185	44.891	297	22.	10.3	1.67	25.1				
239	256	253	3.726	3.709	34.136	27.128	36.248	44.961	283	37.	13.8	1.77	26.8				
240	295	292	3.528	3.509	34.159	27.166	36.296	45.019	279	43.	16.4	1.84	27.7				
241	349	346	3.320	3.297	34.160	27.187	36.328	45.061	274	49.	18.8	1.88	28.5				
242	398	394	3.121	3.096	34.165	27.210	36.361	45.105	270	55.	21.2	1.93	29.0				
243	447	443	2.877	2.849	34.174	27.239	36.404	45.159	264	63.	24.9	1.99	29.9				
244	522	518	2.723	2.691	34.196	27.271	36.443	45.207	254	74.	28.9	2.07	30.8				
245	598	593	2.666	2.629	34.241	27.312	36.487	45.253	238	91.	35.6	2.14	32.1				
246	673	667	2.607	2.565	34.277	27.346	36.524	45.293	227	102.	40.2	2.20	32.9				
247	749	742	2.554	2.507	34.330	27.394	36.574	45.344	214	115.	47.2	2.26	33.6				
153	797	790	2.508	2.458	34.387	27.443	36.625	45.398	202	128.	53.8	2.30	34.6				
248	852	843	2.495	2.442	34.408	27.461	36.644	45.417	198	132.	56.1	2.32	34.2				
105	894	885	2.474	2.418	34.444	27.492	36.676	45.449	193	137.	59.6	2.33	34.9				
106	992	982	2.458	2.395	34.503	27.541	36.725	45.499	184	146.	64.3	2.33	34.9				
107	1092	1081	2.453	2.383	34.553	27.582	36.766	45.539	181	149.	67.5	2.32	34.6				
108	1242	1229	2.430	2.349	34.604	27.626	36.810	45.585	179	151.	72.2	2.28	34.0				
109	1394	1379	2.541	2.447	34.673	27.673	36.851	45.619									
110	1542	1525	2.458	2.353	34.709	27.710	36.892	45.665	189	141.	73.1	2.12	32.5				
111	1692	1672	2.390	2.273	34.737	27.739	36.925	45.702	193	137.	74.0	2.08	31.7				
112	1842	1820	2.363	2.234	34.758	27.759	36.947	45.725	198	133.	73.5	2.02	30.9				
113	1993	1968	2.302	2.161	34.785	27.786	36.978	45.759	208	123.	71.6	1.94	29.6				
114	2195	2167	2.152	1.996	34.788	27.802	37.003	45.792	212	121.	74.4	1.93	29.3				
115	2401	2369	1.943	1.772	34.780	27.813	37.027	45.828	212	122.	80.1	1.96	29.6				
116	2604	2569	1.748	1.562	34.775	27.825	37.050	45.862	213	123.	86.2	1.99	30.1				
117	2807	2767	1.533	1.333	34.755	27.826	37.064	45.889	211	127.	94.4	2.06	31.1				
118	3012	2968	1.386	1.170	34.744	27.828	37.076	45.909	211	129.	99.3	2.09	31.5				
119	3216	3167	1.215	0.984	34.731	27.830	37.089	45.932	210	131.	105.0	2.15	32.0				
120	3419	3365	1.053	0.806	34.719	27.832	37.101	45.954	212	131.	109.4	2.17	32.3				
121	3622	3563	0.907	0.644	34.711	27.836	37.114	45.976	214	131.	113.7	2.19	32.7				
122	3825	3762	0.796	0.515	34.701	27.836	37.121	45.991	214	132.	118.3	2.23	33.0				
123	4027	3958	0.741	0.441	34.698	27.838	37.128	46.001	215	131.	119.9	2.24	33.1				
124	4236	4163	0.703	0.382	34.693	27.837	37.131	46.008	215	132.	122.7	2.26	33.1				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 68 Latitude 46-30 7 S Longitude 1-20 8 E Date 1/18/84 Bottom Depth 4142 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	1	1	7.463	7 463	33.993	26.561	35.499	44.041									
126	5	5	7 463	7.463	33.992	26.560	35.498	44.041									
127	15	15	7.463	7 462	33.993	26.561	35.499	44.042									
128	25	25	7 465	7.463	33.994	26.562	35.499	44.042									
129	34	34	7 466	7.463	33.992	26.560	35.498	44.041									
130	44	44	7 466	7 462	33.992	26.560	35.498	44.041	304	-11.							
131	53	53	7 395	7 390	33.992	26.571	35.511	44.057									
132	64	64	7 050	7 044	33.998	26.624	35.581	44.141									
133	74	74	6 970	6.963	34.001	26.637	35.598	44.162									
134	84	83	6 874	6.866	34.007	26.655	35.620	44.189									
135	94	93	6 580	6.572	34.014	26.700	35.679	44.260									
136	115	115	5 928	5.918	34.020	26.789	35.799	44.410									
137	132	131	4 853	4.843	34.031	26.925	35.988	44.649									
138	147	146	4 693	4 682	34.047	26.956	36.026	44.695									
139	162	161	4 703	4.691	34.087	26.986	36.056	44.723									
140	177	176	4.694	4.681	34.124	27.017	36.087	44.754									
141	217	216	4 454	4.438	34.169	27.079	36.160	44.838									
142	258	255	4 230	4.212	34.175	27.108	36.201	44.890	271	45							
143	297	295	3 976	3.955	34.173	27.133	36.239	44.940									
144	347	344	3 766	3.742	34.172	27.154	36.271	44.982	269	51							
145	550	545	2.924	2.889	34.214	27.268	36.429	45.182	246	80.							
146	699	692	2.691	2.647	34.294	27.353	36.526	45.290	222	106							
147	849	841	2.557	2.503	34.386	27.439	36.618	45.388	202	127.							
148	1001	991	2 536	2.472	34.474	27.512	36.692	45.462	187	142.							

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 69 Latitude 47- 0.6 S Longitude 1-18.1 E Date 1/18/84 Bottom Depth 4485 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
225	2	2	6.110	6.110	33.934	26.697	35.699	44.302	311	-8.	2.2	1.39	19.9				
101	4	4	6.201	6.201	33.935	26.686	35.684	44.283	312	-10	3.2	1.39	20.2	593.	2080.	2262.	
232	26	25	6.100	6.098	33.934	26.698	35.701	44.305	311	-8.	2.2	1.40	20.1				
233	55	55	5.681	5.677	33.941	26.756	35.779	44.402	311	-5	2.6	1 42	20 5				
234	85	85	5.203	5.196	33.960	26.828	35.875	44.520	308	1.	4 6	1.55	21 2				
235	116	116	4.364	4.356	34.037	26.983	36.071	44.754	307	8	6.9	1.60	23.0				
236	146	145	4.139	4.129	34.061	27.026	36.125	44.819	303	14.	7.2	1.64	24.2				
237	176	174	4.039	4.027	34.101	27.068	36.172	44.871	292	26.	9 2	1 70	25 2				
238	216	214	3.886	3.871	34.142	27.117	36.228	44.933	281	38.	12.5	1 79	27.0				
239	255	253	3.609	3.592	34.157	27.156	36.282	45.001	276	45.	15.4	1.87	28.1				
240	295	292	3.442	3.423	34.161	27.176	36.310	45.037	274	48.	17.0	1.90	28.4				
102	299	296	3.513	3.493	34.165	27.172	36.303	45.027	273	49	17.6	1.88	28.6				
241	344	341	3.302	3.280	34.172	27.198	36.340	45.074	268	55.	19.5	1.95	28.9				
242	394	391	2.974	2.949	34.165	27.223	36.382	45.133	267	59.	22.8	1.98	30.1				
243	446	442	2.784	2.757	34.183	27.255	36.424	45.184	259	69	26.3	2.05	30.7				
244	522	517	2.642	2.610	34.228	27.303	36.480	45.247	240	89.	33.9	2 15	32 4				
245	599	594	2.571	2.535	34.283	27.354	36.533	45.303	226	103.	41.0	2 22	33 4				
246	674	668	2.527	2.486	34 323	27.390	36.571	45.343			46.2	2.27	33.9				
247	748	741	2 479	2.433	34.373	27.434	36.618	45.391	205	125.	52 2	2 32	34 5				
103	797	789	2 475	2 426	34.397	27.454	36.638	45.411	201	129	55.6	2.33	35.3				
248	847	839	2.466	2.413	34.432	27.483	36 667	45.441	194	136.	58 7	2 34	35 0				
105	897	888	2.435	2.379	34.459	27.508	36.693	45.468	191	139	61.8	2.33	35.5				
106	994	984	2.463	2.400	34.531	27.563	36.746	45.519	184	146.	66.7	2 31	35 0				
107	1094	1083	2.488	2.417	34.585	27.605	36.786	45.557	182	147.	69.4	2.28	34.6				
108	1248	1235	2.477	2.395	34.646	27.656	36.837	45.609	182	148.	71.3	2.21	33.7				
109	1399	1384	2.460	2.366	34.693	27.696	36.878	45.650	190	140.	71 4	2 14	32 5				
110	1551	1534	2.446	2.340	34.736	27.732	36.915	45.688	195	135	70 8	2 06	31 2				
111	1704	1684	2.377	2.259	34.753	27.753	36.940	45.716	199	131	71 6	2 02	30 6				
112	1855	1833	2.287	2.158	34.770	27.775	36.967	45.748	205	126.	72.2	1.99	29.9				
113	2008	1983	2.161	2.021	34.773	27.788	36.988	45.776	206	126	75.2	1.98	29.8				
114	2210	2181	2.020	1.865	34.777	27.804	37.012	45.808	210	124.	77.2	1.97	29.7				
115	2412	2379	1.828	1.658	34.770	27.814	37.034	45.841	209	126.	83.1	2 01	30 0				
116	2612	2575	1.614	1.431	34.755	27.819	37.051	45.871	209	128	91.6	2.06	30.9				
117	2815	2775	1.466	1.267	34.745	27.822	37.064	45.893	212	127	96.3	2.09	31.2				
118	3020	2975	1.321	1.106	34.739	27.828	37.080	45.917	215	125.	100.1	2.11	31.2				
119	3271	3221	1.119	0.805	34.722	27.829	37.094	45.943	212	130.	106.9	2.16	32.0				
120	3524	3468	0.932	0.678	34.710	27.833	37.109	45.970	213	131.	113.0	2 19	32 4				
121	3779	3717	0.789	0.513	34.699	27.834	37.120	45.990	217	129	117.2	2 23	32.6				
122	4033	3964	0.727	0.427	34.695	27.836	37.127	46.001	215	132.	119 7	2 24	32.9				
123	4287	4212	0.696	0.369	34.692	27.837	37.131	46.009	219	128	121 2	2 25	32 9				
124	4558	4475	0.694	0.338	34.698	27.844	37.140	46.019	215	132.	122.4	2.26	33.0				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 70 Latitude 47-31.0 S Longitude 1-16.8 E Date 1/18/84 Bottom Depth 4490 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
126	94	93	5.300	5.293	33.950	26.809	35.851	44.492	311	-3.							
140	257	255	3.260	3.244	34.153	27.187	36.330	45.067	276	48.							
145	412	409	2.622	2.597	34 197	27.280	36.457	45.225	255	74.							
148	890	881	2.436	2.380	34.506	27.545	36.729	45.504	189	141							

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 71 Latitude 47-59.8 S Longitude 1-19.0 E Date 1/18/84 Bottom Depth 4337 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	2	2	6.088	6.088	33.923	26.691	35.694	44.299	313	-10.	5.4	1.43	20.3				
102	3	3	6.097	6.097	33.938	26.701	35.704	44.308	311	-8.	5.7	1.42	20.6	601.	2094.	2276.	2089.
232	23	23	6.090	6.088	33.921	26.689	35.693	44.297	311	-8.	2.0	1.43	20.3				
233	53	53	6.077	6.073	33.922	26.692	35.696	44.302	316	-13.	2.1	1.41	20.4				
234	83	82	5.451	5.444	33.950	26.791	35.826	44.459	309	-2.	2.3	1.49	20.6				
235	114	113	4.779	4.771	33.958	26.875	35.943	44.608	311	1.	3.6	1.56	21.5		2112.		
236	145	143	4.266	4.256	33.973	26.943	36.036	44.726	314	2.	5.2	1.61	22.9				
237	175	174	3.794	3.782	34.019	27.028	36.145	44.857	304	16.	6.6	1.67	24.8				
238	216	214	3.521	3.507	34.116	27.132	36.263	44.986	286	36.	12.2	1.82	27.2				
239	256	253	3.327	3.311	34.148	27.176	36.316	45.050	280	43.	15.9	1.91	28.6	824.	2148.	2282.	2147.
240	295	293	3.087	3.069	34.149	27.200	36.353	45.098	278	47.	18.4	1.95	29.3				
103	305	302	3.066	3.047	34.152	27.204	36.358	45.104	273	52.		1.95	29.5				
241	346	343	2.877	2.856	34.155	27.224	36.388	45.143	275	52.	21.1	1.98	29.8	858.	2160.	2289.	
242	398	394	2.638	2.614	34.167	27.254	36.431	45.199	264	65.	25.0	2.05	30.9				
243	448	444	2.582	2.555	34.185	27.273	36.454	45.224	257	72.	27.9	2.09	31.7				
244	523	518	2.550	2.519	34.255	27.333	36.514	45.285	235	94.	37.4	2.20	33.2				
245	599	593	2.493	2.457	34.313	27.384	36.568	45.341	219	111.	44.5	2.26	34.3				
246	675	669	2.458	2.417	34.356	27.422	36.607	45.382	208	122.	50.2	2.30	35.0	1108.	2195.	2289	
247	751	744	2.468	2.422	34.414	27.468	36.651	45.425	200	130.	56.1	2.32	35.4				
153	805	797	2.466	2.416	34.447	27.495	36.678	45.452	191	139.	62.3	2.32	35.1				
248	851	843	2.462	2.409	34.468	27.512	36.696	45.469	189	141.		2.32	35.4				
105	854	845	2.449	2.396	34.474	27.518	36.702	45.476	187	143.	64.3	2.32	34.9				
106	953	944	2.440	2.380	34.528	27.563	36.747	45.521	182	148.	68.0	2.32	34.8				
107	1055	1044	2.484	2.416	34.586	27.606	36.787	45.558	171	158.	70.0	2.27	34.5	1157.	2232.	2324.	2233.
108	1207	1194	2.499	2.420	34.653	27.659	36.839	45.609	184	145.	72.2	2.19	33.4	1110.	2233.	2331.	
109	1357	1342	2.486	2.395	34.700	27.699	36.879	45.650									
110	1511	1494	2.494	2.391	34.737	27.729	36.909	45.679	194	135.	70.0	2.05	31.2				
111	1663	1643	2.385	2.271	34.754	27.753	36.939	45.715	197	133.	72.7	2.01	30.7	1017.	2225.	2336	
112	1814	1792	2.229	2.104	34.760	27.771	36.966	45.751	199	133.	76.9	2.02	30.6				
113	1967	1943	2.158	2.022	34.777	27.791	36.991	45.780	204	128.	76.7	1.96	30.0	994.	2208.	2321.	
114	2118	2091	2.041	1.893	34.779	27.803	37.010	45.805	207	126.	79.2	1.95	29.7				
115	2320	2289	1.849	1.687	34.772	27.813	37.031	45.837	210	125.	84.2	1.98	30.1	993.	2219.	2334.	2226
116	2527	2492	1.675	1.498	34.766	27.823	37.051	45.867	209	128.	90.4	2.05	30.5				
117	2729	2691	1.499	1.307	34.760	27.831	37.071	45.897	210	129.	95.9	2.08	31.2	1009.	2233.	2348.	2234.
118	2933	2890	1.317	1.110	34.738	27.827	37.078	45.915	210	130.	90.8	2.03	31.0				
119	3136	3088	1.157	0.935	34.726	27.829	37.091	45.937	210	132.	107.7	2.13	32.4	1049.	2243.	2353.	2240
120	3390	3337	0.927	0.686	34.708	27.831	37.107	45.967	211	133.	114.3	2.17	32.9				
121	3645	3586	0.773	0.511	34.699	27.834	37.120	45.990	213	133.	118.9	2.20	33.7	1070.	2246.	2353.	2248.
122	3900	3835	0.690	0.404	34.695	27.838	37.130	46.005	214	133.	121.5	2.23	33.3				
123	4156	4084	0.665	0.353	34.691	27.837	37.132	46.011	216	131.	124.1	2.23	33.5	1081.	2248.	2354.	2247.
124	4411	4332	0.665	0.326	34.691	27.839	37.136	46.016	214	133.	123.9	2.24	33.7	1076.	2249.	2356.	2248.

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 72 Latitude 48-59.6 S Longitude 1-10.4 E Date 1/19/84 Bottom Depth 3881 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	1	1	5.996	5.996	33.905	26.688	35.696	44.305	311	-8.	4.1	1.32	20.2				
101	4	4	5.999	5.999	33.905	26.688	35.696	44.305	309	-6	3 7	1 39	20 1	597	2098	2281.	
232	26	26	5.991	5.989	33.905	26.689	35.698	44.307	310	-7.	3.6	1 35	20.2				
233	56	55	5.969	5.964	33.907	26.694	35.703	44.314	310	-6.	3.8	1.30	20.2				
234	86	85	5.569	5.562	33.920	26.753	35.782	44.411	310	-3.	4.6	1.48	20.5				
235	115	114	4.726	4.718	33.930	26.859	35.930	44.598	311	2.	6 5	1 54	21 4				
236	146	145	3.935	3.925	33.965	26.971	36.082	44.787	313	6.	8.6	1.55	23.5				
237	177	176	3.682	3.670	33.999	27.023	36.147	44.864	307	14.	10.9	1.59	24.8				
238	217	215	3.310	3.296	34.058	27.106	36.249	44.984	298	26.	15 0	1 75	26.7				
239	258	255	3.476	3.459	34.136	27.153	36 285	45.011	282	40.	17.2	1.84	27.9				
240	297	295	3.126	3.107	34.142	27.191	36.342	45.085	277	48.	20.1		29.1				
105	302	300	3.212	3.193	34.152	27.191	36.337	45.076	275	49.	20.0	1.91	28.9				
241	348	345	2.936	2.915	34.156	27.219	36.380	45.133	270	56.	23.4	1.94	30.0				
242	399	396	2.714	2.690	34.170	27.250	36.423	45.187	263	65	27.6	2.00	30.8				
243	450	446	2.634	2.607	34.197	27.279	36.456	45.223	252	77.	32.3	2.08	31.8				
244	526	521	2.586	2.554	34.257	27.331	36.510	45.280	232	97.	38.4	2.19	33.1				
245	602	596	2.539	2.502	34.301	27.371	36.552	45.323	220	109.	44.4	2.25	34.0				
246	678	671	2.490	2.449	34.356	27.419	36.602	45.376	207	123.	51.3	2.31	34.7				
247	751	744	2.459	2.413	34.400	27.458	36.642	45.416	198	132.	57.1	2.29	35.0				
106	803	795	2.446	2.396	34.432	27.484	36.669	45.444	193	137.	60.4	2.32	35.2				
248	853	844	2.441	2.388	34.460	27.507	36.692	45.467	190	140.	63.1	2.34	35.4				
107	902	893	2.447	2.390	34.494	27.535	36.719	45.493	186	144.	65.4	2.32	35.4				
108	1004	994	2.432	2.368	34.545	27.577	36.762	45.536	180	150.	69.6	2.31	35.2				
109	1106	1094	2.430	2.359	34.597	27.620	36.804	45.578	179	151.	72.4	2.26	34.6				
110	1258	1244	2.416	2.333	34.650	27.664	36.849	45.623	181	149.	74.4	2.21	33.4				
111	1409	1393	2.393	2.299	34.701	27.708	36.893	45.669	187	143.	74 2	2 12	32.3				
112	1561	1543	2.290	2.185	34.731	27.741	36.932	45.713	191	140.	76.6	2.08	31.6				
113	1712	1692	2.244	2.127	34.754	27.764	36.958	45.742	197	134.	76.4	2.02	30.7				
114	1864	1841	2.156	2.028	34.768	27.784	36.983	45.771	202	130.	77.2	1.99	30.0				
115	2016	1991	1.995	1.857	34.768	27.797	37.006	45.803	204	130.	81.7	1.98	30.2				
116	2219	2190	1.855	1.702	34.770	27.811	37.028	45.833	209	126.	82.6	1.97	30.2				
117	2421	2388	1.612	1.445	34.749	27.813	37.045	45.864	205	132.	92.9	2.03	31.3				
118	2625	2588	1.416	1.235	34.742	27.822	37.066	45.896	208	131.	98.2	2.04	31.5				
119	2827	2786	1.264	1.068	34.736	27.829	37.082	45.921	209	132.	102.1	2.10	31.7				
120	3029	2984	1.087	0.876	34.721	27.829	37.094	45.943	210	132.	107.3	2.09					
121	3233	3183	0.898	0.673	34.709	27.833	37.109	45.970	211	133.	112.4		32.9				
122	3489	3433	0.690	0.445	34.695	27.835	37.125	45.998									
123	3744	3682	0.608	0.340	34.692	27.839	37.135	46.014	215	132.	120.5	2.27	33.5				
124	3946	3879	0.574	0.287	34.692	27.842	37.141	46.023	216	132.	122.3	2.27	33.5				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 73 Latitude 49-52.6 S Longitude 1-22.1 E Date 1/19/84 Bottom Depth 3903 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
101	4	3	4.712	4.712	33.872	26.813	35.886	44.555	320	-7.	4.8		20.7	599.	2087		
102	50	50	4.713	4.709	33.872	26.814	35.886	44.555	321	-8.	4.4		20.7				
103	94	93	2.796	2.791	33.927	27.047	36.219	44.981	319	9.	9.9		23.7				
153	144	143	1.947	1.940	33.983	27.161	36.379	45.184	314	21.	17.0		27.1	789.	2127.		
105	194	192	1.934	1.924	34.076	27.237	36.454	45.258	289	46.	23.1		29.7				
106	244	242	2.055	2.042	34.170	27.303	36.512	45.309	259	75.	33 8		31.6				
107	294	292	2.060	2.044	34.210	27.335	36.543	45.339	246	88.	38.5		33.0	1000.	2174		
108	369	366	2.162	2.141	34.289	27.391	36.592	45.382	223	110.	48.4		34.2				
109	505	500	2.235	2.206	34.406	27.479	36.675	45.460	197	135.							
110	654	647	2.182	2.144	34.506	27.565	36.762	45.548	183	149.	71.4		35.6	1210.	2226		
111	803	795	2.210	2.162	34.584	27.626	36.820	45.605									
112	1003	993	2.346	2.283	34.673	27.687	36.874	45.650	182	148.	76.1		32.9	1120.	2227		
113	1207	1194	2.156	2.080	34.700	27.725	36.923	45.709	183	149.	80.9		32.7				
114	1411	1395	2.081	1.990	34.738	27.763	36.965	45.755	194	139.	80.7		31.4	1062.	2234		
115	1613	1594	1.882	1.778	34.747	27.786	37.000	45.802	198	136.	86.7		31.1	1042.	2221.		
116	1864	1841	1.703	1.582	34.758	27.810	37.034	45.846	205	131.	89.4		30.6				
117	2117	2090	1.403	1.266	34.743	27.821	37.063	45.891	206	133.	97.7		31.3	1039.	2226		
118	2369	2337	1.185	1.021	34.726	27.823	37.079	45.920	206	135.	105.4		32.1				
119	2622	2585	1.020	0.847	34.719	27.830	37.096	45.947	209	134.	108.9		32.3	1048.	2234		
120	2900	2857	0.732	0.561	34.700	27.833	37.118	45.986	212	133.	116.3		32.8				
121	3179	3130	0.579	0.366	34.690	27.836	37.130	46.008									
122	3459	3403	0.537	0.299	34.689	27.839	37.137	46.019	215	133.	122.1		33.2				
123	3713	3651	0.526	0.264	34.688	27.840	37.140	46.024	216	132.	122.9		33.1	1085.	2239		
124	3961	3893	0.525	0.238	34.687	27.841	37.143	46.027	216	132.	122.7		33.1	1080.	2246		

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 74 Latitude 50-22.2 S Longitude 1-19.5 E Date 1/20/84 Bottom Depth 3631 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
101	2	2	3.976	3.976	33.874	26.893	36.003	44.707	329	-10.	8.9	1.48	21.9				
107	32	32	3.972	3.970	33.874	26.894	36.004	44.708	313	6.	9.6	1.49	22.0				
108	63	62	3.917	3.913	33.876	26.901	36.014	44.722	329	-10	9 1	1 49	22 1				
109	93	92	3.109	3.103	33.896	26.995	36.150	44.897	327	-1.	12.3	1.63	23.1				
110	123	122	2.514	2.507	33.914	27.061	36.248	45.025	329	1.	15.7	1.74	24.3				
111	152	151	1.870	1.862	33.927	27.123	36.345	45.155	330	6.	19.0	1.81	25.4				
112	181	180	1.291	1.283	33.972	27.200	36.454	45.294	327	14.	23.1	1.87	27.0				
113	222	220	1.278	1.268	34.048	27.262	36.516	45.355	300	41.	29 2	2.00	29 7				
114	262	259	1.542	1.529	34.175	27.346	36.583	45.406	260	78.	39.5	2.18	32.5				
115	302	299	1.756	1.740	34.271	27.408	36.631	45.442	232	104.	48.8	2.28	34.2				
116	350	346	1.877	1.858	34.337	27.451	36.667	45.471	214	121.	56.6	2.33	35.0				
117	399	396	1.957	1.935	34.421	27.513	36.723	45.521	198	136.	64.5	2.36	36.0				
118	450	446	2.017	1.992	34.469	27.547	36.753	45.548	189	144.	68.1	2.36	36.0				
119	519	514	2.045	2.016	34.507	27.576	36.780	45.573	183	150.	71.0	2.36	36.0				
120	592	586	2.069	2.035	34.550	27.609	36.811	45.602	179	154.	74.4	2.35	35.8				
121	665	659	2.067	2.028	34.583	27.635	36.838	45.629	176	157.	77.6	2.34	35.0				
122	737	729	2 067	2.024	34.614	27.661	36.863	45.654	176	157.	81.6	2.31	34.6				
123	832	824	2.055	2.006	34.650	27.691	36.893	45.685	177	156.	83.8	2.27	34.0				
124	994	984	2.009	1.949	34.695	27.731	36.936	45.730	183	150.	86.0	2.20	32.9				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 75 Latitude 50-50.7 S Longitude 1-19.7 E Date 1/20/84 Bottom Depth 3432 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
101	3	3	3.954	3.954	33.880	26.900	36.011	44.716	328	-9.	10.3	1.50	22.2				
102	63	62	3.943	3.939	33.878	26.900	36.012	44.718	328	-9.	9.6	1.50	22.2				
103	112	111	2.789	2.782	33.908	27.033	36.205	44.968	327	1.	16.8	1.73	23.9				
104	152	150	1.398	1.391	33.964	27.186	36.434	45.269	326	14.	23.5	1.90	26.8				
105	201	199	1.222	1.213	34.032	27.253	36.510	45.353	306	35.	29.4	2.00	29.4				
106	252	250	1.620	1.607	34.209	27.368	36.600	45.418	250	87.	44.6	2.25	33.5				
107	303	300	1.826	1.810	34.295	27.422	36.641	45.448	225	110.	53.0	2.34	34.7				
108	403	399	1.961	1.939	34.422	27.513	36.723	45.522	197	137.	65.9	2.39	36.0				
109	503	498	2.050	2.022	34.503	27.572	36.776	45.569	185	148.	72.8	2.39	36.0				
110	602	596	2.101	2.066	34.562	27.615	36.816	45.606	178	154.	77.1	2.38	35.6				
111	702	695	2.105	2.064	34.601	27.647	36.847	45.636	176	156.	79.8	2.36	35.2				
112	850	841	2.091	2.040	34.653	27.691	36.891	45.681	179	153.	82.6	2.30	34.3				
113	1004	994	2.052	1.991	34.697	27.730	36.932	45.724	183	150.	84.6	2.23	33.2				
114	1206	1192	1.952	1.878	34.732	27.767	36.975	45.771	193	141.	85.3	2.16	32.0				
115	1409	1392	1.789	1.702	34.740	27.787	37.005	45.810	198	137.	89.4	2.15	31.7				
116	1612	1592	1.621	1.520	34.746	27.805	37.033	45.848	201	136.	93.2	2.14	31.3				
117	1813	1790	1.451	1.337	34.743	27.816	37.054	45.879	205	133.	97.6	2.14	31.5				
118	2017	1990	1.264	1.137	34.729	27.818	37.068	45.904	206	134.	102.8	2.16	32.0				
119	2216	2187	1.143	1.002	34.729	27.828	37.085	45.928	211	130.	105.0	2.16	32.0				
120	2471	2436	0.876	0.719	34.709	27.830	37.104	45.962	210	134.	112.3	2.21	32.8				
121	2723	2683	0.693	0.518	34.697	27.832	37.118	45.987	212	134.	117.1	2.23	33.1				
122	2978	2933	0.569	0.375	34.691	27.836	37.130	46.007	214	133.	121.1	2.23	33.3				
123	3231	3181	0.509	0.293	34.686	27.837	37.135	46.017	216	132.	122.9	2.23	33.5				
124	3391	3337	0.484	0.254	34.686	27.839	37.140	46.024	216	132.	124.3	2.23	33.6				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 76 Latitude 51-50.2 S Longitude 1-11.6 E Date 1/20/84 Bottom Depth 3026 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
235	2	2	2.763	2.763	33.900	27.028	36.201	44.966						714.	2130.	2286.	
234	3	3	2.763	2.763	33.896	27.025	36.198	44.963	333	-5.	26.3	1.67	25.5				2125.
101	3	3	2.825	2.825	33.894	27.018	36.188	44.949	330	-2.	24.6	1.71	25.2				
236	27	26	2.762	2.760	33.896	27.025	36.199	44.963	332	-4.	26.1	1.68	25.4	718.	2130.	2285.	
237	57	56	2.766	2.763	33.897	27.026	36.199	44.964	333	-5.	25.7	1.67	25.3				
238	87	86	2.290	2.285	33.910	27.076	36.275	45.064	336	-4.	25.7	1.69	25.8				
239	118	117	1.561	1.555	33.933	27.150	36.389	45.215	335	3.	27.2	1.77	26.5	763.	2142.	2288.	
240	149	147	0.898	0.892	34.002	27.250	36.526	45.386	322	22.	33.2	1.92	28.6				
241	178	177	1.197	1.189	34.113	27.320	36.577	45.420	282	59.	40.1	2.08	31.5				
242	218	216	1.504	1.493	34.237	27.398	36.636	45.461	244	94.	50.1	2.24	33.9				
243	258	256	1.631	1.618	34.315	27.452	36.681	45.498	223	114.	57.6	2.31	35.0	1113.	2214.	2309	
102	304	302	1.739	1.723	34.385	27.500	36.723	45.533	206	130.	64.8	2.38	35.6				
103	355	352	1.843	1.824	34.448	27.543	36.759	45.563	193	142.	69.7	2.45	35.9				
104	405	401	1.970	1.948	34.510	27.583	36.791	45.588	182	152.	74.6	2.43	36.0				
105	455	451	2.023	1.998	34.553	27.614	36.818	45.612	177	156.	76.5	2.42	35.8				
106	531	526	2.032	2.002	34.594	27.646	36.850	45.642	176	157.	79.6	2.41	35.2	1211.	2242.	2328	
107	607	601	2.037	2.002	34.621	27.668	36.871	45.663	176	157.	81.5	2.38	34.7				
108	682	675	2.036	1.996	34.646	27.688	36.891	45.683	176	157.	83.2	2.37	34.1				
109	732	725	2.035	1.992	34.665	27.704	36.907	45.699	179	154.	83.7	2.35	33.7	1166.	2244.	2336	
110	858	849	1.997	1.946	34.698	27.734	36.939	45.733	183	150.	85.6	2.30	32.9				
111	959	949	1.963	1.906	34.715	27.751	36.958	45.753	187	146.	85.4	2.22	32.3				
245	1004	993	1.942	1.882	34.719	27.756	36.964	45.761									
244	1004	994	1.941	1.881	34.720	27.757	36.965	45.762	187	147.	85.8	2.14	32.4				
248	1005	994	1.942	1.882	34.720	27.757	36.965	45.762									
112	1060	1049	1.933	1.869	34.731	27.766	36.975	45.772	193	141.	85.9	2.18	31.7	1074.	2242.	2347	
113	1212	1198	1.817	1.743	34.744	27.787	37.002	45.806	197	138.	87.4	2.14	31.1				
114	1363	1348	1.626	1.544	34.737	27.796	37.023	45.837	199	138.	92.9	2.17	31.3	1051.	2242.	2351.	2235.
115	1515	1497	1.439	1.348	34.729	27.804	37.042	45.866	200	138.	98.2	2.18	31.8				
116	1668	1647	1.266	1.166	34.724	27.812	37.060	45.895	202	138.	103.0	2.21	32.0	1066.	2246.	2353	
117	1819	1796	1.126	1.016	34.719	27.818	37.075	45.917	204	137.	106.1	2.21	32.1				
118	1971	1945	0.940	0.822	34.707	27.822	37.090	45.942	206	137.	111.9	2.26	32.6				
119	2123	2094	0.816	0.688	34.699	27.823	37.099	45.959	208	136.	113.8	2.27	32.9				
120	2326	2294	0.692	0.550	34.694	27.828	37.112	45.979	210	135.	117.6	2.29	33.1	1088.	2251.	2356.	2245
121	2529	2493	0.615	0.458	34.693	27.833	37.122	45.995									
122	2731	2691	0.541	0.369	34.688	27.834	37.128	46.006									
123	2935	2890	0.520	0.301	34.685	27.834	37.130	46.010	215	132.	124.7	2.30	33.5	1089.	2251.	2356.	
124	3070	3022	0.503	0.302	34.684	27.834	37.133	46.014	213	135.	126.6	2.31	33.6	1109.	2250.	2352	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 77 Latitude 53- 1.8 S Longitude 1-23.8 E Date 1/21/84 Bottom Depth 2446 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
188	5	5	1.498	1.498	33.938	27.158	36.401	45.230	343	-4.	41.5	1.77	27.1				
101	46	46	1.474	1.472	33.940	27.161	36.405	45.236	343	-4.	41.7	1.79	27.3	774.	2162.	2308.	
375	63	62	1.401	1.398	33.948	27.173	36.421	45.255									
102	92	91	0.708	0.704	33.958	27.226	36.513	45.385	348	-2.	41.9	1.80	27.4	777.	2161.	2307.	
376	109	108	0.067	0.063	33.983	27.282	36.606	45.512									
103	121	120	0.052	0.048	34.009	27.304	36.629	45.535	340	12.	45.5	1.90	28.7				
377	161	160	0.680	0.673	34.260	27.471	36.755	45.623									
104	171	170	0.587	0.580	34.235	27.457	36.746	45.620	267	79.	61.1	2.14	32.7				
105	211	209	0.981	0.972	34.355	27.529	36.794	45.644	233	110.	69.4	2.24	34.1				
106	251	249	1.278	1.266	34.431	27.570	36.817	45.651	216	124.	74.7	2.29	35.1				
107	300	298	1.634	1.619	34.532	27.626	36.852	45.665	188	148.	81.1	2.33	35.6				
108	350	346	1.730	1.712	34.571	27.650	36.870	45.678	189	146.	84.0	2.33	35.5				
109	401	397	1.800	1.778	34.615	27.680	36.896	45.700	179	156.	86.8	2.31	35.3				
275	407	403	1.800	1.778	34.619	27.684	36.899	45.703									
378	407	403	1.796	1.774	34.630	27.693	36.908	45.712									
110	451	447	1.807	1.783	34.643	27.703	36.918	45.721	181	154.	88.3	2.28	34.7				
111	552	546	1.763	1.733	34.681	27.737	36.954	45.759	187	148.	90.2	2.22	33.9				
112	645	638	1.697	1.662	34.703	27.760	36.980	45.789	190	146.	92.1	2.19	33.1				
276	655	648	1.687	1.651	34.701	27.759	36.980	45.789									
113	740	732	1.633	1.592	34.714	27.774	36.998	45.810	198	138.	93.5	2.16	32.8				
114	840	831	1.562	1.515	34.718	27.783	37.011	45.827	195	142.	95.6	2.15	32.6				
115	996	985	1.431	1.375	34.720	27.794	37.031	45.854									
116	997	986	1.431	1.375	34.719	27.794	37.030	45.853	199	139.	97.9	2.15	32.5				
277	1004	993	1.402	1.346	34.719	27.796	37.034	45.859									
117	1151	1137	1.276	1.212	34.717	27.804	37.049	45.881	201	138.	102.6	2.16	32.6				
118	1302	1287	1.072	1.000	34.710	27.812	37.070	45.913	204	137.	107.5	2.17	32.8				
119	1450	1432	0.876	0.796	34.703	27.820	37.089	45.944	207	136.	111.9	2.19	33.0				
278	1501	1483	0.796	0.714	34.699	27.822	37.096	45.955									
120	1650	1630	0.707	0.615	34.698	27.827	37.107	45.971	211	134.	116.6	2.19	33.2				
121	1852	1828	0.578	0.474	34.691	27.830	37.118	45.990	211	135.	121.5	2.22	33.3				
122	2055	2027	0.504	0.386	34.689	27.834	37.127	46.004	217	130.	124.1	2.27	33.4				
123	2308	2275	0.459	0.323	34.686	27.835	37.132	46.012	212	136.	127.0	2.28	33.6				
124	2467	2432	0.436	0.288	34.688	27.839	37.138	46.020	212	136.	126.8	2.29	33.7				

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Leg 2 Station 78 Latitude 53-49.0 S Longitude 1-20.2 E Date 1/21/84 Bottom Depth 2454 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
175	2	2	1.251	1.251	33.933	27.171	36.427	45.270	344	-3.	42.6	1.71	26.4	775.			
101	43	42	1.209	1.207	33.937	27.177	36.436	45.281	344	-2.	42.4	1.78	26.5	779.	2160.	2305.	
102	83	82	0.791	0.788	33.948	27.213	36.496	45.362	348	-3.	43.2	1.80	26.8				
103	122	121	-0.461	-0.465	34.010	27.329	36.684	45.619	345	12.	47.5	1.93	28.5				
104	150	149	-0.241	-0.246	34.117	27.406	36.746	45.667	310	44.	55.1	2.05	30.6				
105	201	199	0.991	0.982	34.399	27.563	36.827	45.677	225	117.	72.7	2.30	34.3				
106	251	249	1.486	1.474	34.502	27.612	36.847	45.668	197	141.	78.8	2.35	35.0				
107	300	297	1.673	1.658	34.565	27.650	36.873	45.683	185	151.	83.0	2.35	35.0				
108	351	348	1.777	1.758	34.610	27.678	36.895	45.699	181	154.	85.3	2.33	34.7				
109	403	399	1.769	1.747	34.640	27.703	36.920	45.725	181	154.	87.7	2.30	34.1				
110	454	450	1.758	1.734	34.650	27.712	36.930	45.735	182	153.	88.7	2.29	33.9				
111	505	500	1.760	1.733	34.663	27.722	36.940	45.745	183	152.	89.2	2.28	33.6				
112	605	599	1.685	1.652	34.688	27.749	36.970	45.779	186	150.	92.0	2.24	33.0				
113	705	698	1.594	1.555	34.705	27.769	36.996	45.810	193	143.	94.3	2.20	32.4				
114	806	797	1.495	1.451	34.713	27.783	37.016	45.835	195	142.	96.5	2.19	32.2				
115	907	897	1.368	1.318	34.716	27.795	37.035	45.861	197	142.	100.0	2.19	32.1				
116	1008	997	1.259	1.204	34.716	27.803	37.050	45.882	200	140.	101.7	2.18	32.1				
117	1211	1197	1.005	0.939	34.705	27.812	37.074	45.920	204	138.	108.6	2.20	32.4				
118	1413	1396	0.785	0.709	34.698	27.822	37.096	45.955	208	136.	112.8	2.24	32.5				
119	1615	1595	0.623	0.535	34.692	27.827	37.112	45.980	211	135.	115.9	2.24	32.6				
120	1817	1794	0.476	0.376	34.685	27.831	37.125	46.002	213	134.	118.1	2.26	32.8				
121	1818	1794	0.478	0.378	34.685	27.831	37.125	46.002	215	132.	118.0	2.26	32.8				
122	2071	2043	0.353	0.237	34.681	27.836	37.138	46.023	216	132.	121.7	2.27	33.0				
123	2322	2289	0.298	0.164	34.678	27.838	37.144	46.033	217	132.	123.8	2.27	33.0				
124	2486	2450	0.272	0.125	34.676	27.838	37.147	46.038	219	130.	125.4	2.27	33.1				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 79 Latitude 54-37.8 S Longitude 1-15.4 E Date 1/22/84 Bottom Depth 4213 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
188	5	5	0.762	0.762	33.880	27.160	36.445	45.314	347	-1.	38.7	1.73	25.3				
106	930	920	1.549	1.497	34.731	27.795	37.024	45.840	199	138.	93.9	2.14	31.4				
107	1031	1020	1.369	1.312	34.722	27.801	37.041	45.867	201	138.	99.0	2.16	31.6	1073.	2237.	2342	
108	1128	1115	1.245	1.182	34.720	27.808	37.055	45.889	202	138.	102.1	2.18	31.8				
109	1276	1261	1.103	1.032	34.713	27.813	37.068	45.910	204	137.	105.9	2.20	32.3	1088.	2237.	2340.	
110	1429	1412	0.903	0.824	34.703	27.818	37.086	45.939	206	137.	109.9	2.22	32.6				
111	1583	1564	0.763	0.675	34.697	27.823	37.099	45.960	208	136.	113.2	2.23	32.5	1088.	2242.	2346.	
112	1733	1711	0.633	0.537	34.692	27.827	37.112	45.980	213	133.	115.7	2.24	33.0				
113	1889	1864	0.496	0.391	34.683	27.829	37.122	45.998	213	134.	117.5	2.25	33.0				
114	2086	2058	0.387	0.269	34.680	27.833	37.134	46.017	216	132.	118.9	2.26	33.2	1106.	2249.	2351	
115	2286	2254	0.277	0.146	34.675	27.836	37.144	46.034	219	130.	121.0	2.25	33.2				
116	2488	2452	0.185	0.040	34.670	27.838	37.152	46.048	221	129.	122.6	2.26	33.3	1117.	2248.	2348	
117	2683	2643	0.131	-0.029	34.668	27.840	37.158	46.058	222	129.	123.2	2.27	33.3				
118	2887	2843	0.090	-0.086	34.667	27.842	37.163	46.066									
119	3091	3042	0.064	-0.129	34.667	27.844	37.168	46.074	227	125.	125.7	2.24	33.1	1105.	2244.	2346.	
120	3341	3286	0.064	-0.151	34.666	27.844	37.170	46.076	227	125.	125.4	2.23	33.1				
121	3590	3530	0.079	-0.159	34.666	27.845	37.171	46.078	227	125.	125.7	2.26	33.0	1099.	2241.	2343	
122	3843	3776	0.098	-0.165	34.665	27.844	37.171	46.078	226	126.	126.2	2.27	33.1				
123	4050	3977	0.115	-0.169	34.668	27.847	37.173	46.081									
124	4191	4115	0.128	-0.171	34.671	27.850	37.176	46.084	227	125.	128.7	2.26	33.1	1092.	2238.	2341	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 80 Latitude 55-47.5 S Longitude 1-28.2 E Date 1/22/84 Bottom Depth 3994 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	3	3	0.842	0.842	33.958	27.218	36.497	45.361	341	4	57 7	1 74	25.4	770.	2147.	2293.	2151
102	55	55	0 746	0.744	33.958	27.224	36.509	45.378	343	3.	57.9	1 76	25 5	776	2146	2290.	
103	114	113	-1.049	-1.052	34.210	27.515	36.902	45.868	307	55.	75.9	2.07	29 5	950	2187.	2304	
104	154	153	-0.339	-0.344	34.365	27 611	36.953	45.875	267	88	81.2	2 15	31 8	1038.	2205.	2311	
105	205	203	0.262	0.254	34.479	27.672	36.977	45.864	239	110.	85.8	2.21	32 7	1098.	2218.	2317	
106	255	253	0.569	0.558	34.546	27.708	36.994	45.864	226	120.	89 8	2 23	32.6				
107	331	328	0.994	0.979	34.624	27.745	37.005	45.851	205	137.	95.4	2.23	32 5	1127.	2234	2331	
108	406	402	1.084	1.065	34.666	27.773	37.027	45.868	201	140.	98 5	2 22	32.1				
109	481	476	1 085	1.062	34.683	27.787	37.041	45.882	201	140.	102.1	2 21	31 9				
110	530	524	1.017	0.991	34.686	27.794	37.052	45.896	202	139.	104 1	2 20	32 1	1099	2240.	2342	
111	604	598	0.929	0.900	34.689	27.802	37.066	45.915	203	139.	106.6	2 20	32 0				
112	806	797	0 690	0.651	34.688	27.817	37.095	45.957	210	135.	113.7	2 22	32 1				
113	1007	996	0 494	0.445	34.684	27.826	37.116	45.990	212	134.	117.3	2.23	32 3	1094	2234	2336.	2247.
114	1260	1245	0.352	0.290	34.681	27.833	37.132	46.014									
115	1510	1491	0.192	0.116	34.678	27.840	37.150	46.041	218	131.	122.6	2.25	32 7				
116	1759	1736	0.077	-0.013	34.671	27.841	37.158	46.057	222	129.	124.7	2.26	32 8	1107.	2239	2340	
153	2002	1975	0.000	-0.106	34.669	27.845	37 167	46.071	225	127.	126.3	2.26	32 9				
118	2269	2237	-0.083	-0.207	34.662	27.844	37.173	46.082	229	123.	126.3	2.25	32 8	1094	2235.	2337	
119	2505	2468	-0.139	-0.279	34.662	27.848	37.181	46.094	232	121.	127 2	2.25	32 8				
120	2796	2754	-0.177	-0.309	34.659	27.848	37.185	46 102	234	120	127.4	2.24	33 0	1086	2232	2335	
121	3087	3038	-0 220	-0.406	34.657	27.850	37.190	46.111	238	116.	126.3	2.23	33 1				
122	3374	3318	-0.243	-0.453	34.658	27.853	37.196	46.120	239	116.	125.6	2.22	32 7	1069	2232.	2338.	
123	3671	3608	-0.248	-0.485	34.657	27.853	37.199	46.124	241	114.	125.8	2.23	33 0				
124	3896	3827	-0.263	-0.521	34.656	27.854	37.202	46.129	241	114	125.7	2.23	33 1	1070	2236.	2342	2235

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 81 Latitude 57- 1.4 S Longitude 1-30.5 E Date 1/23/84 Bottom Depth 4222 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
229	1	1	0.954	0.954	34.025	27.264	36.536	45.393	346	-2.	53.9	1.63	24.8	734.	2143.	2297	
188	5	5	0.884	0.884	34.028	27.271	36.547	45.408	347	-3.							
230	24	24	0.873	0.872	34.027	27.271	36.548	45.409	348	-4.	53.9	1.63	24.8	735.	2142.	2296	
231	56	55	0.571	0.569	34.040	27.300	36.594	45.471	350	-3.	54.5	1.66	24.9				
232	87	86	-0.935	-0.937	34.128	27.444	36.826	45.786	335	26.	65.8	1.94	27.3				
233	99	98	-1.190	-1.192	34.214	27.523	36.919	45.892	315	48.	73.3	2.07	29.3				
234	147	146	-0.659	-0.663	34.384	27.640	37.001	45.941	275	83.	81.1	2.14	31.7				
235	176	174	0.049	0.043	34.491	27.693	37.010	45.909	243	108.	86.9	2.19	32.7				
236	215	213	0.414	0.405	34.557	27.726	37.021	45.898	227	120.	91.7	2.21	33.0				
237	255	252	0.764	0.753	34.621	27.757	37.030	45.888	212	132.	95.9	2.21	33.0				
238	295	292	0.854	0.841	34.648	27.773	37.041	45.893	207	136.	98.3	2.21	32.9				
239	345	341	0.868	0.852	34.668	27.788	37.055	45.907	206	137.	100.8	2.20	32.7				
240	395	391	0.841	0.823	34.678	27.798	37.066	45.920	206	137.	103.0	2.18	32.7				
241	446	441	0.748	0.728	34.678	27.804	37.078	45.936	208	136.	105.9	2.19	32.7				
242	497	492	0.805	0.782	34.691	27.811	37.082	45.937	206	137.	108.5	2.18	32.5				
243	547	542	0.742	0.717	34.693	27.817	37.091	45.950	207	137.	110.9	2.18	32.6				
244	598	592	0.681	0.653	34.692	27.820	37.098	45.960	209	135.	112.3	2.17	32.6				
245	674	666	0.603	0.572	34.691	27.824	37.107	45.974	210	135.	114.0	2.20	32.7				
246	749	741	0.477	0.443	34.683	27.826	37.116	45.990	212	134.	115.4	2.19	32.8				
247	850	840	0.392	0.353	34.683	27.831	37.126	46.005	213	134.	117.1	2.22	33.0				
248	953	942	0.333	0.289	34.681	27.833	37.132	46.014	214	134.	118.1	2.20	33.1				
117	1057	1045	0.273	0.223	34.678	27.834	37.137	46.023	218	130.	120.4	2.23	33.4				
102	1157	1143	0.211	0.156	34.675	27.835	37.142	46.032	215	134.	122.9	2.25	33.7				
104	1309	1293	0.152	0.089	34.675	27.839	37.150	46.043	217	133.	123.2	2.25	33.6				
105	1460	1442	0.095	0.023	34.673	27.841	37.156	46.053	220	130.	124.4	2.25	33.4				
106	1612	1591	0.041	-0.039	34.671	27.843	37.161	46.062	224	127.	124.1	2.25	33.4				
107	1764	1740	-0.013	-0.103	34.667	27.843	37.165	46.069	226	125.	125.1	2.24	33.2				
108	1915	1890	-0.055	-0.154	34.664	27.843	37.169	46.075	228	124.	125.5	2.24	33.3				
109	2119	2089	-0.121	-0.233	34.663	27.846	37.176	46.088	232	121.	125.5	2.24	33.4				
110	2321	2287	-0.169	-0.295	34.660	27.847	37.181	46.095	234	119.	125.7	2.24	33.4				
111	2523	2485	-0.214	-0.354	34.659	27.849	37.186	46.104	235	119.	126.7	2.24	33.4				
112	2726	2684	-0.257	-0.412	34.657	27.850	37.191	46.112	238	116.	126.1	2.23	33.3				
113	2930	2884	-0.293	-0.464	34.655	27.851	37.195	46.119	240	115.	126.7	2.24	33.2				
115	3135	3084	-0.314	-0.502	34.656	27.854	37.200	46.126	241	114.	126.0	2.24	33.1				
153	3338	3282	-0.328	-0.533	34.654	27.853	37.201	46.130	242	114.	125.4	2.24	33.1				
118	3541	3480	-0.338	-0.561	34.656	27.856	37.206	46.136	241	115.	125.5	2.23	33.2				
120	3742	3677	-0.345	-0.586	34.655	27.856	37.208	46.139	245	111.	124.3	2.27	33.1				
121	3946	3874	-0.350	-0.611	34.653	27.856	37.209	46.141	247	109.	124.1	2.24	32.9				
122	4151	4074	-0.343	-0.624	34.654	27.857	37.211	46.144			124.9	2.23	32.9				
123	4151	4074	-0.342	-0.623	34.653	27.856	37.210	46.143	247	109.	124.4	2.23	32.8				
124	4294	4213	-0.319	-0.615	34.654	27.857	37.210	46.143	246	110.	124.4	2.21					

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 82 Latitude 58-14.7 S Longitude 1-23.5 E Date 1/23/84 Bottom Depth 4504 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	1	1	0.992	0.992	34.046	27.279	36.548	45.403	345	-2	52.2	1.51	22.9				
117	4	4	1.014	1.014	34.032	27.266	36.535	45.388	346	-3.	50.9	1.52	22.8				
232	28	27	0.991	0.990	34.043	27.277	36 546	45.401	343	0.	52.0	1.50	22.9				
233	59	58	0.901	0.899	34.045	27.284	36.559	45.418	343	1	52.6	1.51	23.1				
234	91	91	-1.498	-1.500	34.205	27.526	36.941	45.932	326	40.	74.5	1.98	28.2				
235	121	120	-1.496	-1.499	34.297	27.601	37.014	46.004	314	52	79.4	1.98	29 7				
236	150	149	-1.319	-1.323	34.351	27.639	37.040	46.019	303	61.	81.1	1.99	30 4				
237	180	178	-0.978	-0.983	34.408	27.673	37.053	46.010	285	76	84.5	2.02	31.2				
238	218	216	-0.261	-0.269	34.509	27.723	37.058	45.974	250	103	93.1	2.10	32.3				
239	258	255	0.000	-0.010	34.567	27.757	37.076	45.976	234	117.	99.0	2.12	32.6				
240	297	294	0.186	0.174	34.613	27.784	37.091	45.981	223	126	104.5	2.14	32.8				
241	345	342	0.273	0.259	34.638	27.800	37.102	45.986	218	130.	108.0	2.16	32.9				
242	394	390	0.330	0.314	34.657	27.812	37.110	45.991	214	134	111.3	2.17	33.0				
243	444	439	0.365	0.346	34.668	27.819	37.115	45.994	212	135.	114.1	2 17	33.0				
244	516	510	0.381	0.359	34.676	27.825	37.120	45.999	210	137	116.4	2.18	33.1				
245	592	586	0.306	0.280	34.673	27.827	37.127	46.009	211	137.	118.0	2.21	33.3				
246	664	657	0.267	0.238	34.675	27.831	37 133	46.018	212	136.	118.8	2.21	33.4				
247	740	732	0.257	0.224	34.675	27.832	37.135	46.021	211	137	119.9	2.21	33.5				
106	799	791	0.213	0.178	34.674	27.833	37.139	46.028	212	137	119.6	2.28	33.4				
248	840	830	0.201	0.164	34.675	27.835	37.142	46.031	212	137	120.9	2.20	33.5				
107	899	889	0.179	0.139	34.675	27.836	37.145	46.035	212	137.	120.7	2.30	33.5				
108	1001	989	0.144	0.099	34.675	27.839	37.149	46.042	218	132.	121 7	2 30	33.5				
109	1208	1194	0.062	0.006	34.669	27.839	37.155	46.052	219	131.	122.8	2.30	33.4				
110	1413	1395	0.001	-0.067	34.667	27.841	37.161	46.063	223	128.	123.0	2.29	33.3				
111	1613	1592	-0.070	-0.149	34.664	27.843	37.168	46.074	226	126.	123.4	2.28	33.0				
112	1815	1791	-0.123	-0.214	34.662	27.844	37.173	46.084	229	124	123.3	2.27	33.2				
113	2017	1989	-0 171	-0.275	34.659	27.845	37.178	46.091	233	120	123 1	2 25	33.0				
114	2222	2190	-0.200	-0.318	34.661	27.849	37.184	46.100	236	118.	124.3	2.24	33.1				
115	2477	2440	-0.255	-0.391	34.659	27.851	37.190	46.110	237	117.	124.3	2.22	33.0				
116	2731	2688	-0.293	-0.448	34.656	27.851	37.194	46.117	240	115.	124.0	2.22	32.8				
153	2983	2935	-0.322	-0.497	34.658	27.855	37.201	46.127	242	113.	123.5	2.20	32.8				
118	3234	3181	-0.349	-0.544	34.655	27.854	37.203	46.132	242	114.	123.8	2.19	32.7				
119	3476	3417	-0.375	-0.591	34.651	27.853	37.205	46.137	248	108.	121 3	2 18	32.5				
120	3721	3655	-0 386	-0.624	34.650	27.854	37.208	46.141	246	110.	122.0	2.17	32.5				
121	3964	3892	-0.393	-0.654	34.651	27.856	37.212	46.147	248	109	121.2	2.17	32.5				
122	4217	4138	-0.411	-0.697	34.647	27.855	37.213	46.151	249	108.	120.4	2.18	32.5				
123	4482	4396	-0.426	-0.738	34.651	27.860	37.220	46.160	251	107.	119.1	2.18	32.5				
124	4577	4488	-0.467	-0.788	34.647	27.859	37.222	46.165	252	106.	118.5	2.17	32 5				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 83 Latitude 59- 9.6 S Longitude 1-16.2 E Date 1/24/84 Bottom Depth 4587 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - - -		uM/KG -	- - - - - -		uatm	uM/kg	uEq/kg	uM/kg
230	2	2	0.952	0.952	34.024	27.264	36.536	45.393	344	0.	51.7	1.47	22.3				
117	4	4	0.925	0.925	34.032	27.272	36.545	45.403	344	0.	53.1	1.43	22.4	678.	2144.	2312	
231	20	20	0.887	0.886	34.036	27.277	36.553	45.413	343	1.	52.5	1.51	22.6				
232	47	47	-0.033	-0.035	34.137	27.411	36.739	45.648	343	9.	60.4	1.74	24.9	752.	2165.	2318.	
233	74	74	-1.769	-1.770	34.294	27.606	37.036	46.042	333	36.	73.7	1.99	28.8				
234	95	94	-1.793	-1.795	34.308	27.618	37.050	46.057	329	40.	74.9	2.01	29.1	891.	2194.	2323.	
235	119	117	-1.560	-1.563	34.381	27.671	37.087	46.079	312	54.	77.9	2.04	30.1	931.	2201.	2323	
236	148	146	-0.468	-0.473	34.539	27.758	37.104	46.031	252	103.	97.3	2.17	32.6	1056.	2223.	2329.	
237	176	175	0.189	0.182	34.626	27.794	37.101	45.990	220	129.	106.8	2.23	33.2	1116.	2241.	2340.	
238	215	213	0.435	0.426	34.665	27.812	37.103	45.978	208	139.	110.8	2.27	33.9				
239	255	252	0.500	0.489	34.678	27.819	37.106	45.978	204	142.	113.2	2.26	34.2				
240	295	292	0.496	0.484	34.683	27.823	37.111	45.983	198	148.	116.0	2.28	34.6				
241	346	343	0.448	0.433	34.685	27.828	37.118	45.993	199	148.	119.5	2.31	34.8				
242	397	393	0.416	0.399	34.686	27.831	37.123	45.999	197	150.	121.4	2.29	35.0				
243	447	442	0.383	0.364	34.686	27.833	37.127	46.005	196	151.	123.2	2.29	35.0				
244	523	517	0.342	0.320	34.685	27.834	37.132	46.012	198	150.	125.0	2.28	34.9				
245	599	592	0.306	0.280	34.683	27.835	37.135	46.017	201	147.	126.2	2.25	34.8				
246	674	666	0.240	0.211	34.680	27.836	37.140	46.027	206	143.	124.5	2.25	34.4				
247	750	742	0.158	0.126	34.674	27.836	37.145	46.036	212	137.	122.2	2.19	34.1				
105	805	796	0.139	0.104	34.673	27.837	37.147	46.039	215	135.	124.7	2.19	33.9	1135.	2250.	2348.	
248	852	842	0.151	0.113	34.677	27.839	37.149	46.041	213	136.	124.1	2.19	34.2				
106	906	895	0.166	0.125	34.678	27.840	37.148	46.040	211	138.	128.9	2.21	34.1				
107	1007	995	0.120	0.074	34.677	27.841	37.153	46.047	212	138.	130.0	2.17	34.0				
108	1108	1095	0.071	0.020	34.674	27.842	37.157	46.054	216	134.	129.7	2.21	33.9				
109	1261	1246	0.009	-0.050	34.671	27.843	37.162	46.063	219	132.	130.1	2.21	33.7				
110	1413	1395	-0.043	-0.110	34.669	27.845	37.168	46.072	222	130.	129.8	2.20	33.6				
111	1565	1545	-0.091	-0.167	34.667	27.846	37.172	46.080	226	126.	129.5	2.21	33.5				
112	1767	1744	-0.141	-0.229	34.666	27.848	37.178	46.089	229	124.	129.2	2.20	33.3				
113	1967	1940	-0.196	-0.296	34.662	27.849	37.182	46.097	233	120.	128.8	2.19	33.2	1085.	2248.	2353	
114	2220	2188	-0.245	-0.362	34.661	27.851	37.189	46.107	237	117.	128.3	2.19	33.1				
115	2473	2436	-0.293	-0.428	34.657	27.851	37.193	46.115	238	117.	127.3	2.18	33.0				
116	2725	2683	-0.336	-0.489	34.655	27.852	37.198	46.123	242	113.	125.8	2.17	32.9	1070.	2241.	2347	
153	2977	2929	-0.370	-0.543	34.656	27.855	37.204	46.133	244	112.	125.4	2.17	32.7				
118	3228	3174	-0.403	-0.596	34.653	27.855	37.207	46.139	246	110.	124.7	2.16	32.6				
119	3474	3414	-0.429	-0.643	34.651	27.856	37.211	46.145	248	109.	123.6	2.16	32.5				
120	3725	3659	-0.449	-0.686	34.650	27.857	37.214	46.151	250	107.	122.6	2.15	32.5	1047.	2231.	2340	
121	3975	3902	-0.464	-0.724	34.649	27.858	37.218	46.157	252	105.	121.3	2.14	32.6				
122	4228	4148	-0.477	-0.762	34.647	27.858	37.220	46.161	253	105.	119.4	2.14	32.6	1044.	2231.	2340	
123	4481	4395	-0.478	-0.788	34.646	27.858	37.222	46.165	254	104.	119.0	2.14	32.6				
124	4656	4564	-0.474	-0.803	34.646	27.859	37.223	46.167	255	103.	117.9	2.14	32.6	1042.	2234.	2344	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 84 Latitude 60- 1.3 S Longitude 1-10.1 E Date 1/24/84 Bottom Depth 5322 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	1	1	1.012	1.012	33.905	27.164	36.435	45.290	359	-16.	50.6	1.26	21.0				
234	23	23	1.009	1.008	33.909	27.168	36.438	45.294	361	-18.	50.2	1.26	21.1	610.	2113.	2296.	
235	56	56	-1.630	-1.631	34.242	27.560	36.983	45.981	341	27.	70.0	1.90	28.2				
236	87	86	-1.775	-1.777	34.332	27.637	37.067	46.073			90.2	2.01	31.9				
237	125	124	-0.906	-0.910	34.478	27.727	37.101	46.053	278	82.	103.4	2.10	33.2	1019.			
238	154	153	-0.051	-0.057	34.595	27.782	37.103	46.006	233	118.	109.3	2.15	34.1	1105.	2233.	2333	
239	184	182	0.387	0.380	34.657	27.808	37.103	45.980	206	141.	114.2	2.15	34.1				
240	223	221	0.429	0.420	34.680	27.824	37.116	45.991	209	138.	117.7	2.17	34.6	1162.	2239.	2332	
241	263	260	0.480	0.469	34.693	27.832	37.121	45.993	200	146.	118.9	2.18	35.0				
242	303	300	0.449	0.436	34.686	27.828	37.119	45.993	195	151.	120.6	2.12	34.8				
243	352	349	0.401	0.386	34.689	27.834	37.127	46.004	198	149.	121.4	2.21	34.8				
244	402	397	0.382	0.365	34.685	27.832	37.126	46.004	197	150.	122.2	2.21	34.9	1209.	2259.	2348	
245	454	450	0.350	0.331	34.687	27.835	37.132	46.012	196	151.	123.2	2.21	34.8				
246	505	499	0.332	0.310	34.690	27.839	37.137	46.018	199	149.	124.1	2.22	34.9				
247	580	574	0.319	0.294	34.689	27.839	37.138	46.020	199	149.	124.1	2.22	34.8				
248	655	648	0.291	0.262	34.687	27.839	37.140	46.023	201	147.	126.3	2.21	34.6				
102	705	697	0.267	0.236	34.681	27.836	37.138	46.023	202	146.	128.9	2.25	34.4	1180.	2254.	2347	
117	706	698	0.268	0.237	34.682	27.837	37.139	46.024	202	146.	128.5	2.21	34.4	1192.	2250.	2341.	2254.
103	803	794	0.230	0.194	34.680	27.837	37.142	46.029	206	143.	129.5	2.24	34.3				
104	902	892	0.187	0.147	34.680	27.840	37.147	46.037	209	140.	128.4	2.23	34.2				
105	998	986	0.140	0.095	34.678	27.841	37.152	46.045	211	139.	128.2	2.23	33.9				
106	1095	1082	0.107	0.057	34.671	27.838	37.151	46.046	220	130.	127.9	2.21	33.7	1123.	2244.	2343.	2247.
107	1294	1278	0.013	-0.048	34.670	27.842	37.161	46.062	223	128.	127.7	2.21	33.6				
108	1497	1478	-0.050	-0.122	34.674	27.849	37.173	46.078	227	125.	127.6	2.19	33.5				
109	1699	1676	-0.114	-0.198	34.666	27.847	37.175	46.084	227	125.	127.5	2.20	33.4	1094.	2245.	2348.	
110	1946	1919	-0.178	-0.277	34.663	27.848	37.181	46.095	231	122.	127.5	2.19	33.3				
111	2194	2162	-0.226	-0.342	34.662	27.851	37.187	46.105	235	119.	126.9	2.18	33.3	1082.	2238.	2342.	
112	2449	2412	-0.278	-0.411	34.660	27.853	37.193	46.115	239	115.	125.4	2.17	33.2				
113	2701	2659	-0.319	-0.471	34.659	27.854	37.199	46.123	240	115.	124.6	2.17	33.1	1065.	2240.	2347.	2240.
114	2953	2905	-0.349	-0.521	34.657	27.855	37.203	46.130	243	112.	124.1	2.16	33.0				
115	3207	3153	-0.373	-0.565	34.657	27.857	37.207	46.137	246	110.	123.7	2.15	32.9	1054.	2236.	2345	
116	3463	3403	-0.402	-0.616	34.654	27.857	37.210	46.143	247	109.	123.5	2.15	32.9				
153	3718	3652	-0.425	-0.662	34.659	27.863	37.219	46.154	249	108.	123.6	2.15	32.8	1046.	2235.	2345.	2236.
118	3972	3899	-0.473	-0.733	34.655	27.863	37.223	46.163	254	104.	120.3	2.16	32.6				
119	4241	4160	-0.504	-0.789	34.649	27.860	37.224	46.167	255	103.	118.2	2.15	32.6	1037.	2234.	2345.	
120	4502	4414	-0.510	-0.822	34.651	27.863	37.229	46.174	255	103.	117.8	2.15	32.6				
121	4766	4670	-0.495	-0.835	34.649	27.862	37.229	46.174	256	103.	118.1	2.15	32.6	1032.	2238.	2350.	2228.
122	5024	4920	-0.470	-0.839	34.650	27.863	37.230	46.176	256	103.	118.7	2.16	32.5				
123	5227	5117	-0.449	-0.842	34.651	27.864	37.231	46.177	258	101.	119.3	2.16	32.6	1041.	2232.	2342.	2233.
124	5228	5118	-0.448	-0.841	34.651	27.864	37.231	46.177	255	104.	119.3	2.16	32.6				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 85 Latitude 61- 0.2 S Longitude 0-52.7 E Date 1/25/84 Bottom Depth 5374 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - - -		uM/KG -	- - - - - -		uatm	uM/kg	uEq/kg	uM/kg
230	2	2	1.151	1.151	33.772	27.048	36.313	45.163	360	-18.	55.1	1.20	20.1				
102	5	5	1.138	1.138	33.774	27.051	36.316	45.167	362	-19.	54.7	1.20	20.1	587.	2102.	2290.	
233	22	22	1.125	1.124	33.773	27.051	36.317	45.169	332	11.	56.2	1.21	20.1				
234	66	65	-1.759	-1.760	34.276	27.591	37.021	46.026	338	31.	71.4	1.89	28.3				
235	81	80	-1.806	-1.808	34.303	27.615	37.047	46.055	333	36.	72.9	1.93	28.8				
236	100	99	-1.802	-1.804	34.335	27.641	37.072	46.079	329	40.	74.7	1.95	29.2				
237	148	147	0.029	0.024	34.598	27.781	37.097	45.995	226	125.	104.0	2.16	33.4				
238	198	196	0.335	0.327	34.662	27.815	37.113	45.993	198	150.	117.2	2.24	34.8				
239	217	215	0.403	0.394	34.672	27.820	37.113	45.989	199	148.	117.5	2.22	34.5				
240	257	254	0.398	0.387	34.676	27.823	37.117	45.994	203	144.	117.7	2.20	34.2				
241	297	294	0.409	0.397	34.680	27.826	37.119	45.995	200	147.	119.8	2.22	34.3				
242	348	344	0.379	0.365	34.680	27.828	37.123	46.000	199	148.	121.4	2.22	34.4				
243	399	394	0.341	0.324	34.679	27.829	37.126	46.007	199	149.	122.4	2.22	34.5				
244	449	445	0.309	0.290	34.678	27.830	37.130	46.012	202	146.	121.9	2.22	34.4				
245	525	519	0.297	0.275	34.678	27.831	37.131	46.014	202	146.	123.4	2.22	34.4				
246	599	592	0.287	0.261	34.680	27.834	37.135	46.018	201	147.	125.2	2.23	34.6				
247	674	667	0.262	0.233	34.681	27.836	37.138	46.024	202	146.	125.6	2.23	34.3				
248	749	741	0.235	0.202	34.681	27.838	37.142	46.029	206	143.	126.5	2.22	34.1				
103	809	800	0.221	0.185	34.681	27.839	37.144	46.032									
104	909	898	0.172	0.131	34.678	27.839	37.148	46.039									
105	1009	997	0.122	0.076	34.680	27.844	37.156	46.049	216	134.	128.5	2.19	34.0				
106	1109	1096	0.085	0.034	34.676	27.843	37.157	46.053	215	135.	127.9	2.18	33.8				
107	1258	1243	0.027	-0.032	34.674	27.845	37.163	46.063	217	134.							
108	1457	1438	-0.040	-0.110	34.669	27.845	37.167	46.072	227	125.							
109	1709	1686	-0.114	-0.199	34.665	27.846	37.174	46.083	230	122.	127.9	2.17	33.4				
110	1964	1937	-0.190	-0.290	34.662	27.848	37.182	46.096	237	116.	125.7	2.17	33.2				
111	2220	2187	-0.239	-0.356	34.661	27.851	37.188	46.106	240	114.	125.9	2.17	33.1				
112	2474	2437	-0.275	-0.410	34.660	27.852	37.193	46.114	244	110.	125.8	2.16	33.0				
113	2729	2686	-0.309	-0.463	34.659	27.854	37.198	46.122	243	112.	125.6	2.16	32.9				
114	2983	2934	-0.340	-0.514	34.658	27.856	37.203	46.130	245	110.	125.4	2.16	32.8				
115	3237	3182	-0.368	-0.563	34.655	27.855	37.205	46.135	245	111.	124.7	2.16	32.7				
116	3491	3431	-0.401	-0.618	34.655	27.858	37.211	46.144	249	107.	124.1	2.16	32.6				
153	3746	3679	-0.426	-0.665	34.654	27.859	37.215	46.151	260	97.	124.2	2.15	32.7				
118	4002	3928	-0.464	-0.727	34.651	27.859	37.219	46.158	259	98.	121.5	2.16	32.6				
119	4255	4174	-0.498	-0.785	34.652	27.863	37.226	46.169	255	103.	118.8	2.15	32.5				
120	4510	4422	-0.504	-0.817	34.650	27.862	37.228	46.172	258	100.	117.7	2.15	32.5				
121	4766	4669	-0.492	-0.832	34.648	27.861	37.228	46.173	259	99.	118.7	2.14	32.5				
122	5020	4916	-0.469	-0.838	34.650	27.863	37.230	46.175	258	101.	119.3	2.15	32.7				
123	5275	5162	-0.441	-0.840	34.651	27.864	37.231	46.176	258	101.	120.7	2.15	32.6				
124	5479	5360	-0.416	-0.839	34.652	27.865	37.231	46.177	256	103.	121.4	2.15	32.6				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 86 Latitude 62- 0.4 S Longitude 0-44.9 E Date 1/25/84 Bottom Depth 5340 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	1	1	1.254	1.254	33.867	27.118	36.375	45.219	369	-28.	46.0	1.17	20.0				
117	4	4	1.267	1.267	33.869	27.118	36.375	45.218	360	-19.	45.4	1.22	20.0	583.	2114.	2306.	
234	23	22	1.036	1.035	33.870	27.135	36.404	45.259	361	-18.	45.5	1.21	20.0				
235	51	50	-1.738	-1.739	34.212	27.539	36.969	45.974	342	27.	67.4	1.91	28.0				
236	71	70	-1.803	-1.804	34.256	27.576	37.009	46.017	336	33.	69.1	1.91	28.5				
237	86	85	-1.789	-1.791	34.283	27.598	37.030	46.037	332	37.	69.4	1.92	28.9				
238	123	122	-0.193	-0.197	34.578	27.776	37.105	46.016	227	126.	103.7	2.17	33.4	1134.	2245.	2342	
239	148	147	0.260	0.254	34.647	27.807	37.109	45.994	212	136.	109.2	2.21	33.7				
240	198	196	0.416	0.408	34.670	27.817	37.109	45.985	202	145.	114.4	2.22	33.9				
241	247	245	0.422	0.412	34.677	27.823	37.115	45.990	201	146.	117.3	2.23	34.1				
242	298	295	0.399	0.387	34.680	27.826	37.120	45.997	198	149.	119.9	2.25	34.3				
243	359	355	0.377	0.362	34.682	27.829	37.124	46.003	195	152.	122.3	2.27	34.7				
244	400	395	0.362	0.345	34.683	27.831	37.127	46.006	196	151.	123.0	2.22	34.7	1219.	2264.	2352	
245	450	445	0.336	0.317	34.683	27.833	37.130	46.011	197	151.	124.1	2.23	34.6				
246	500	495	0.316	0.295	34.683	27.834	37.133	46.015	198	150.	124.6	2.25	34.5				
247	602	595	0.286	0.260	34.684	27.837	37.138	46.021	203	145.	125.0	2.24	34.3				
248	703	695	0.251	0.220	34.683	27.838	37.141	46.027	206	142.	125.6	2.24	34.0				
102	759	750	0.231	0.198	34.680	27.837	37.142	46.029	206	143.	128.3	2.22	34.1	1186.	2258.	2350	
103	809	800	0.214	0.178	34.679	27.837	37.143	46.031	207	142.	128.4	2.24	34.1				
104	910	899	0.168	0.127	34.679	27.840	37.149	46.040	209	140.	128.5	2.25	34.1				
105	1010	998	0.133	0.087	34.678	27.842	37.153	46.046	213	137.	128.3	2.24	33.9				
106	1111	1098	0.092	0.041	34.676	27.843	37.156	46.052	215	135.	128.5	2.26	34.0	1133.	2261.	2361	
107	1313	1296	0.011	-0.051	34.672	27.844	37.163	46.064	220	131.	127.5	2.24	34.1				
108	1515	1495	-0.055	-0.128	34.669	27.846	37.170	46.075	224	128.	127.7	2.24	33.5				
109	1718	1695	-0.116	-0.201	34.665	27.846	37.174	46.084			127.4	2.25	33.4	1102.	2250.	2353.	
110	1921	1894	-0.181	-0.278	34.664	27.849	37.182	46.096	232	121.	126.7	2.24	33.5				
111	2174	2143	-0.230	-0.344	34.661	27.850	37.187	46.104	235	119.	126.6	2.23	33.4	1079.	2246.	2352	
112	2428	2391	-0.273	-0.405	34.660	27.852	37.193	46.114	237	117.	126.2	2.23	33.3				
113	2681	2639	-0.312	-0.462	34.658	27.853	37.197	46.121	239	116.	124.7	2.23	33.2				
114	2933	2885	-0.343	-0.513	34.657	27.855	37.202	46.129	242	113.	125.1	2.23	33.2				
115	3184	3131	-0.369	-0.560	34.656	27.856	37.206	46.135	245	111.	124.2	2.24	33.1	1057.	2241.	2350.	
116	3436	3376	-0.393	-0.605	34.654	27.857	37.209	46.141	248	108.	123.2	2.24	33.1				
153	3692	3626	-0.418	-0.653	34.655	27.859	37.215	46.150	249	108.	123.2	2.23	33.0				
118	3948	3876	-0.440	-0.698	34.654	27.860	37.219	46.156	246	111.	122.9	2.22	33.2				
119	4200	4120	-0.467	-0.749	34.652	27.861	37.222	46.163	252	106.	120.7	2.20	33.0	1041.	2239.	2350	
120	4456	4369	-0.484	-0.792	34.650	27.861	37.225	46.168	254	104.	118.1	2.20	33.1				
121	4712	4617	-0.483	-0.818	34.650	27.862	37.228	46.172	255	103.	117.9	2.18	33.0	1042.	2238.	2349	
122	4968	4865	-0.465	-0.828	34.649	27.862	37.228	46.173	255	103.	118.2	2.19	33.0				
123	5225	5114	-0.443	-0.836	34.651	27.864	37.230	46.176	255	104.	119.6	2.18	33.1	1034.	2241.	2353.	
124	5452	5334	-0.417	-0.837	34.651	27.864	37.231	46.176	255	104.	120.5	2.19		1040.	2244.	2356	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 87 Latitude 63- 0.2 S Longitude 0-35.8 E Date 1/26/84 Bottom Depth 5297 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	2	2	1.169	1.169	33.899	27.149	36.411	45.258	361	-19.	46.8	1.19	20.3				
231	2	2	1.220	1.220	33.907	27.152	36.411	45.255	363	-22.	45.4	1.19	20.5	589.	2119.	2310	
232	30	29	1.013	1.012	33.909	27.167	36.438	45.294	363	-20.	45.8	1.25	20.7	592.	2121.	2311	
233	62	62	-1.722	-1.723	34.185	27.516	36.946	45.950	346	23.	67.2	1.90	28.0				
234	92	91	-1.773	-1.775	34.253	27.573	37.004	46.011	337	32.	68.7	1.92	28.5				
235	122	120	-1.638	-1.641	34.332	27.633	37.055	46.052	311	56.	71.7	2.00	30.2				
236	150	148	-0.159	-0.164	34.591	27.785	37.112	46.021	226	126.	101.5	2.19	33.5				
237	179	177	0.409	0.402	34.662	27.811	37.104	45.980	209	138.	107.1	2.19	33.7				
238	219	217	0.509	0.500	34.678	27.818	37.105	45.976	209	137.	112.0	2.18	33.7				
239	259	256	0.497	0.486	34.679	27.820	37.108	45.979	208	138.	114.8	2.18	33.6				
240	299	296	0.474	0.461	34.680	27.822	37.111	45.984	204	142.	116.8	2.19	33.7				
241	350	346	0.411	0.396	34.680	27.826	37.119	45.995	201	146.	119.7	2.20	34.0				
242	400	396	0.380	0.363	34.680	27.828	37.123	46.001	202	145.	120.9	2.22	34.3				
243	451	446	0.360	0.341	34.680	27.829	37.125	46.005	201	146.	122.7	2.23	34.4				
244	527	521	0.335	0.312	34.680	27.831	37.129	46.009	199	149.	124.0	2.20	34.9				
245	602	595	0.318	0.292	34.682	27.833	37.132	46.015	204	144.	124.4	2.21	34.2				
246	678	671	0.290	0.260	34.681	27.834	37.135	46.019	202	146.	125.6	2.21	34.2				
247	754	746	0.259	0.226	34.681	27.836	37.139	46.025	205	143.	126.6	2.20	34.1				
248	855	845	0.221	0.183	34.681	27.839	37.144	46.032	209	140.	127.6	2.20	34.0				
102	908	897	0.204	0.163	34.679	27.838	37.145	46.034	209	140.	130.8	2.26	33.7				
103	1009	997	0.162	0.116	34.677	27.839	37.149	46.040	211	138.	131.6	2.23	33.7				
104	1160	1146	0.105	0.051	34.676	27.842	37.155	46.050	215	135.	131.8	2.23	33.6				
105	1311	1294	0.050	-0.012	34.674	27.844	37.161	46.060	218	133.	131.1	2.22	33.6				
106	1463	1444	-0.003	-0.074	34.671	27.844	37.165	46.068	222	129.	126.5	2.25	33.3				
107	1614	1593	-0.057	-0.136	34.670	27.847	37.171	46.077	224	128.	126.6	2.26	33.2				
108	1766	1742	-0.110	-0.198	34.667	27.848	37.176	46.085	227	125.	126.6	2.23	33.1				
109	1920	1893	-0.150	-0.248	34.665	27.849	37.180	46.092	231	122.	125.8	2.23	33.1				
110	2123	2092	-0.198	-0.309	34.661	27.848	37.183	46.099	233	120.	125.2	2.23	33.1				
111	2326	2291	-0.239	-0.364	34.661	27.851	37.189	46.108	235	119.	125.3	2.22	32.9				
112	2529	2490	-0.273	-0.413	34.660	27.853	37.193	46.115	239	115.	124.9	2.21	32.8				
113	2733	2690	-0.302	-0.457	34.658	27.853	37.196	46.120	239	116.	124.9	2.22	32.6				
114	2936	2889	-0.324	-0.495	34.660	27.856	37.202	46.128	242	113.	124.1	2.22	32.6				
115	3140	3087	-0.349	-0.536	34.658	27.857	37.205	46.133	243	113.	124.0	2.22	32.5				
116	3394	3336	-0.376	-0.585	34.656	27.857	37.208	46.140	246	110.	122.5	2.20	32.5				
153	3649	3584	-0.398	-0.629	34.654	27.858	37.212	46.145	247	110.	122.3	2.22	32.5				
118	3905	3833	-0.423	-0.678	34.656	27.861	37.218	46.155	249	108.	123.3	2.21	32.5				
119	4160	4081	-0.452	-0.731	34.652	27.860	37.220	46.160	251	106.	122.0	2.21	32.4				
120	4365	4280	-0.473	-0.772	34.652	27.862	37.225	46.166	254	104.	120.4	2.21	32.4				
121	4673	4579	-0.481	-0.812	34.651	27.863	37.228	46.172	254	104.	118.5	2.20	32.4				
122	4929	4827	-0.470	-0.829	34.650	27.863	37.229	46.174	254	104.	118.7	2.20	32.3				
123	5186	5076	-0.449	-0.837	34.650	27.863	37.230	46.175	254	105.	119.9	2.19	32.4				
124	5395	5278	-0.425	-0.838	34.651	27.864	37.231	46.176	254	105.	122.7	2.17	32.5				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 88 Latitude 64- 0.1 S Longitude 0-20.4 E Date 1/26/84 Bottom Depth 5175 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	2	1	1.865	1.865	34.024	27.200	36.421	45.229	357	-21.	47.5	1.33	22.0				
117	4	4	1.664	1.664	34.022	27.213	36.445	45.264	357	-20.	48.4	1.29	22.0	637.			2126
232	25	25	0.870	0.869	34.018	27.264	36.541	45.402	360	-16.	46.7	1.33	22.1				
233	63	63	-1.609	-1.610	34.223	27.544	36.966	45.963	329	38.	67.1	1.99	28.6				
234	78	77	-1.246	-1.248	34.351	27.636	37.033	46.007	294	69.	74.1	2.07	30.6	976.			2203.
235	96	95	-0.063	-0.066	34.501	27.707	37.030	45.935	243	109.	84.7	2.16	32.6				
236	116	114	0.656	0.651	34.589	27.737	37.017	45.881	213	132.	91.1	2.19	33.2				
237	145	144	0.871	0.865	34.639	27.764	37.031	45.882	203	140.	96.8	2.20	33.3				
238	175	173	1.103	1.095	34.676	27.779	37.032	45.870	197	144.	98.9	2.18	33.1	1143.	2249.	2345	
239	214	212	1.117	1.107	34.692	27.791	37.043	45.880									
240	255	252	1.034	1.022	34.691	27.796	37.052	45.895	200	141.	103.4	2.16	32.7				
241	295	292	0.992	0.978	34.697	27.803	37.063	45.907	201	141.	105.3	2.15	32.6				
242	346	342	0.909	0.893	34.698	27.810	37.074	45.923	203	139.	107.6	2.14	32.7				
243	397	392	0.879	0.861	34.700	27.813	37.079	45.930	204	139.	109.4	2.14	32.6				
244	447	443	0.816	0.795	34.702	27.819	37.089	45.943	205	138.	110.7	2.14	32.6	1101			
245	497	492	0.746	0.723	34.698	27.821	37.094	45.953	206	138.	112.9	2.15	32.7				
246	548	542	0.653	0.628	34.695	27.824	37.103	45.967	206	139.	115.2	2.16	32.9				
247	599	592	0.508	0.481	34.685	27.825	37.113	45.984	206	140.	117.2	2.18	33.4				
248	700	692	0.423	0.391	34.683	27.829	37.122	45.998	203	144.	119.9	2.22	33.8				
102	800	790	0.370	0.334	34.684	27.833	37.129	46.009	203	144.	124.1	2.22	33.8				
103	899	889	0.330	0.289	34.683	27.834	37.134	46.016	203	145.	125.7	2.25	34.1	1180	2256.	2348.	2256.
104	998	986	0.293	0.246	34.681	27.835	37.137	46.021	205	143.	127.3	2.25	34.1				
105	1098	1085	0.260	0.208	34.682	27.838	37.142	46.029	209	140.	127.3	2.22	33.7				
106	1300	1283	0.181	0.118	34.677	27.839	37.148	46.040	213	136.	128.0	2.23	33.6	1148.	2252.	2348.	
107	1502	1482	0.096	0.022	34.674	27.842	37.157	46.054	217	133.	129.1	2.22	33.6				
108	1705	1682	0.030	-0.056	34.670	27.843	37.162	46.064	222	129.	128.3	2.21	33.4				
109	1908	1882	-0.030	-0.129	34.670	27.846	37.170	46.076	225	127.	128.1	2.20	33.3	1105.	2247.	2349	
110	2110	2080	-0.099	-0.211	34.667	27.848	37.177	46.087	229	124.	128.5	2.19	33.2				
111	2313	2278	-0.145	-0.271	34.665	27.850	37.182	46.095	232	121.	128.4	2.19	33.1	1093.	2245.	2348.	2244.
112	2516	2477	-0.179	-0.319	34.662	27.850	37.185	46.101	235	119.	127.5	2.19	33.0				
113	2768	2723	-0.209	-0.368	34.659	27.850	37.188	46.107	236	118.	127.5	2.18	33.0				
114	3016	2966	-0.246	-0.425	34.658	27.851	37.193	46.115	244	111.	126.9	2.17	32.9				
115	3272	3216	-0.275	-0.475	34.660	27.855	37.200	46.125	242	113.	126.0	2.17	32.8	1059.	2241.	2349	
116	3528	3466	-0.298	-0.521	34.662	27.859	37.206	46.134	245	110.	126.4	2.17	32.9				
153	3783	3714	-0.319	-0.565	34.656	27.856	37.207	46.136	246	110.	126.8	2.17	33.0				
118	4040	3964	-0.334	-0.604	34.655	27.857	37.210	46.142			127.0	2.18	33.0				
119	4295	4212	-0.335	-0.631	34.655	27.859	37.213	46.146	249	108.	128.7	2.17	32.9	1047.	2239.	2348.	
120	4552	4462	-0.340	-0.662	34.653	27.858	37.214	46.150	249	108.	129.8	2.16	32.9				
121	4809	4710	-0.345	-0.695	34.652	27.859	37.217	46.154	250	107.	128.2	2.15	32.8	1045.	2236.	2346	
123	5067	4960	-0.439	-0.814	34.652	27.864	37.229	46.173	255	103.	122.4	2.17	32.6	1047	2235	2344	2235.
124	5280	5167	-0.428	-0.828	34.652	27.865	37.230	46.175	255	103.	122.3	2.16	32.6				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 89 Latitude 65- 0.0 S Longitude 0- 5.7 E Date 1/27/84 Bottom Depth 3607 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	3	2	1.324	1.324	34.102	27.302	36.551	45.387	356	-16.	50.7	1.27	22.5				
117	3	3	1.389	1.389	34.101	27.297	36.542	45.375	354	-15.	51.2	1.29	22.7	654.	2147.	2322	
236	29	29	0.710	0.709	34.104	27.343	36.628	45.496	360	-14.	48.8	1.31	22.7				
237	61	61	-1.303	-1.304	34.288	27.587	36.989	45.967	312	52.	74.3	1.99	29.0				
238	89	88	-0.159	-0.162	34.499	27.710	37.039	45.949	244	109.	84.7	2.11	32.3				
239	118	117	0.997	0.992	34.642	27.758	37.018	45.862									
240	147	146	1.114	1.107	34.665	27.769	37.021	45.859	199	142.	96.5	2.13	33.1				
243	177	176	1.134	1.126	34.676	27.776	37.028	45.865	202	138.	98.2	2.14	33.0				
244	218	215	1.058	1.048	34.680	27.785	37.041	45.882	197	144.	100.6	2.10	32.7				
245	259	256	1.105	1.093	34.693	27.792	37.045	45.884	198	143.	100.0	2.13	32.8				
246	298	295	1.108	1.094	34.699	27.797	37.050	45.888	199	142.	102.2	2.12	32.7				
247	348	345	1.052	1.036	34.700	27.802	37.058	45.899	200	141.	103.4	2.11	32.5				
102	403	399	0.916	0.897	34.696	27.808	37.072	45.921	205	137.	105.4	2.13	32.4				
103	453	448	0.785	0.766	34.687	27.809	37.081	45.937	206	138.	105.8	2.15	32.6				
104	528	523	0.838	0.813	34.699	27.816	37.084	45.938	204	139.	109.1	2.13	32.6				
248	576	569	0.846	0.819	34.705	27.820	37.088	45.941	207	136.	110.8	2.13	32.5				
105	604	597	0.780	0.751	34.700	27.820	37.093	45.949	207	137.	110.6	2.13	32.5				
106	680	672	0.734	0.702	34.700	27.824	37.099	45.958	205	139.	113.0	2.13	32.7				
107	756	747	0.678	0.642	34.697	27.825	37.103	45.966	206	139.	115.1	2.14	32.9				
108	857	847	0.601	0.560	34.695	27.828	37.112	45.979	206	139.	116.9	2.15	33.1				
109	958	946	0.521	0.475	34.692	27.831	37.119	45.991	206	140.	119.0	2.18	33.4				
110	1059	1046	0.447	0.396	34.687	27.832	37.124	46.001	206	141.	122.0	2.22	33.6				
111	1211	1196	0.371	0.312	34.684	27.834	37.132	46.013	207	141.	123.5	2.22	33.6				
112	1363	1345	0.319	0.251	34.683	27.837	37.138	46.022	210	138.	124.5	2.22	33.4				
113	1514	1494	0.252	0.175	34.680	27.838	37.144	46.033	215	134.	125.5	2.22	33.4				
114	1666	1643	0.184	0.098	34.677	27.840	37.151	46.043	216	134.	126.7	2.22	33.4				
115	1818	1792	0.114	0.019	34.673	27.841	37.156	46.053	220	130.	126.5	2.21	33.3				
116	1970	1942	0.051	-0.053	34.670	27.843	37.162	46.063	222	129.	126.2	2.20	33.2				
153	2173	2141	-0.012	-0.130	34.670	27.847	37.170	46.076	226	126.	127.0	2.20	33.1				
118	2376	2339	-0.070	-0.202	34.666	27.847	37.175	46.085	229	123.	127.2	2.19	33.1				
119	2604	2563	-0.122	-0.270	34.664	27.849	37.181	46.094	234	119.	127.9	2.19	33.0				
120	2833	2787	-0.165	-0.331	34.663	27.851	37.187	46.104	236	118.	127.6	2.17	32.9				
121	3087	3035	-0.202	-0.388	34.660	27.851	37.191	46.111	236	118.	128.1	2.17	32.8				
122	3342	3284	-0.232	-0.440	34.660	27.854	37.196	46.119	242	113.	126.4	2.16	32.7				
123	3571	3507	-0.268	-0.495	34.658	27.855	37.200	46.127			126.2	2.16	32.7				
124	3671	3605	-0.304	-0.540	34.656	27.855	37.204	46.132	243	113.	127.0	2.15	32.7				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 90 Latitude 66- 3.6 S Longitude 0-17.4 W Date 1/27/84 Bottom Depth 3787 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	1	1	0.931	0.931	34.041	27.279	36.552	45.409	355	-11.	52.3	1.27	22.3				
117	4	4	1.003	1.003	34.040	27.273	36.542	45.396	356	-13.	50.8	1.31	22.0	629.	2133.	2313	
235	27	27	0.732	0.731	34.048	27.297	36.581	45.449	356	-11.	53.7	1.33	22.5				
236	54	54	-1.150	-1.151	34.296	27.588	36.980	45.950	308	55.	72.8	1.81	29.4				
237	88	87	0.153	0.150	34.541	27.728	37.037	45.929	231	118.	87.5	2.19	32.7				
238	117	115	0.956	0.951	34.637	27.757	37.019	45.865	202	140.	93.4	2.20	33.4				
239	146	145	1.148	1.141	34.673	27.773	37.023	45.860	196	144.	97.2	2.18	33.2				
240	176	174	1.168	1.160	34.682	27.779	37.028	45.863	196	144.	98.1	2.16	33.0				
241	216	214	1.163	1.153	34.691	27.787	37.036	45.872	197	143.	99.7	2.16	32.8				
242	257	254	1.151	1.137	34.699	27.794	37.044	45.880	198	142.	100.1	2.16	32.7				
243	297	294	1.056	1.042	34.700	27.802	37.057	45.898	200	141.	101.9	2.15	32.6				
244	348	344	1.010	0.994	34.702	27.806	37.064	45.908	201	140.	103.9	2.14	32.5				
245	399	395	0.914	0.895	34.701	27.812	37.076	45.925	203	139.	105.7	2.14	32.6				
246	449	444	0.641	0.621	34.682	27.814	37.094	45.958	209	136.	105.9	2.15	32.8				
247	499	494	0.692	0.669	34.690	27.818	37.094	45.956	209	135.	107.8	2.14	32.7				
102	504	498	0.706	0.683	34.690	27.817	37.093	45.953	207	137.	109.6	2.17	32.6				
248	550	544	0.809	0.783	34.706	27.823	37.093	45.948	205	138.	110.7	2.15	32.6				
103	554	548	0.799	0.773	34.704	27.822	37.093	45.948	205	138.	111.9	2.14	32.5				
104	604	597	0.751	0.723	34.703	27.825	37.098	45.957	206	138.	113.3	2.16	32.7				
105	653	645	0.699	0.668	34.700	27.826	37.103	45.964	206	138.	114.6	2.17	32.9				
106	703	695	0.656	0.623	34.698	27.827	37.106	45.970	207	138.	115.7	2.17	32.9				
107	752	743	0.599	0.564	34.695	27.828	37.111	45.978	207	138.	116.1	2.17	32.9				
108	800	791	0.566	0.528	34.693	27.829	37.114	45.983	206	140.	118.1	2.20	33.0				
109	849	839	0.511	0.471	34.689	27.829	37.117	45.989	207	139.	118.1	2.22	33.1				
110	947	936	0.433	0.388	34.685	27.830	37.124	46.000	206	141.	120.3	2.22	33.6				
111	1045	1032	0.430	0.380	34.688	27.833	37.127	46.004	207	140	122.5	2.24	33.6				
112	1194	1179	0.355	0.297	34.685	27.836	37.134	46.016	208	140.	124.4	2.26	33.8				
113	1330	1313	0.307	0.241	34.685	27.839	37.141	46.025	213	135.	124.6	2.24	33.3				
114	1525	1505	0.215	0.138	34.679	27.840	37.148	46.038	213	136.	126.3	2.26	33.6				
115	1722	1699	0.131	0.042	34.676	27.842	37.156	46.052	218	132.	126.7	2.26	33.4				
116	1922	1894	0.056	-0.045	34.674	27.846	37.164	46.065	223	128.	126.9	2.23	33.2				
153	2122	2091	-0.019	-0.133	34.670	27.847	37.171	46.077	226	126.	126.9	2.23	33.1				
118	2322	2287	-0.080	-0.208	34.666	27.847	37.176	46.086	229	123.	126.8	2.23	33.1				
119	2575	2535	-0.143	-0.289	34.665	27.851	37.184	46.098	233	120.	127.4	2.24	32.9				
120	2828	2782	-0.189	-0.354	34.663	27.852	37.189	46.107	236	118.	127.2	2.23	32.8				
121	3082	3031	-0.225	-0.410	34.661	27.853	37.194	46.115	240	114.	126.0	2.22	32.8				
122	3339	3281	-0.257	-0.464	34.659	27.854	37.198	46.122	242	113.	125.6	2.21	32.7				
123	3599	3534	-0.275	-0.505	34.659	27.856	37.202	46.129	244	111.	125.3	2.20	32.6				
124	3775	3706	-0.296	-0.542	34.658	27.857	37.206	46.134	245	111.	125.9	2.20	32.7				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 91 Latitude 66-58.8 S Longitude 0-18.9 W Date 1/28/84 Bottom Depth 4666 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	3	2	0.683	0.683	33.974	27.240	36.528	45.401	366	-20	57.1	1 39	22 1				
117	3	3	0.675	0.675	33.975	27.241	36.530	45.403	362	-16.	57.7	1 37	22 1	640.	2134	2312	
232	25	24	0.278	0.277	33.964	27.255	36.567	45.462	368	-18.	59.7	1 51	23 6				
233	56	55	-1 304	-1.305	34.381	27.663	37.063	46.039	303	61	80.9	1 97	29.6				
234	75	74	-0.903	-0.905	34.489	27.736	37.109	46.061	272	88.	87.5	2.04	30.9				
235	99	98	0.233	0.229	34.609	27.778	37.082	45.969	226	123.	96.0	2.13	32 6				
236	123	122	0.728	0.723	34.661	27.791	37.065	45.924	208	136.	99.9	2.13	32.9				
237	148	147	0.717	0.711	34.661	27.792	37.067	45.926	211	133.	100.8	2.12	32.9				
238	178	176	0.851	0.843	34.683	27.801	37.068	45.920	206	137.	102.7	2.12	32.7				
239	218	215	0.791	0.781	34.683	27.805	37.075	45.931	211	132.	103.7	2.12	32.7				
240	258	255	0.778	0.767	34.685	27.807	37.079	45.935	208	135.	105.0	2 12	32.7				
241	299	295	0.778	0.765	34.690	27.812	37.083	45.939	206	137.	107.1	2 12	32 7	1111.	2243	2343.	
242	349	346	0.638	0.623	34.684	27.815	37.095	45.959	209	136.	107.9	2 12	32.9				
243	400	396	0.521	0.504	34.676	27.816	37.103	45.974	212	134.	107.6	2.12	32 8				
244	451	446	0.494	0.474	34.676	27.818	37.107	45.979	212	134.	108.6	2.13	32.9				
245	502	496	0.494	0.472	34.678	27.820	37.109	45.981	214	132.	109.6	2.14	33.0				
246	552	546	0.546	0.521	34.685	27.823	37.108	45.978	209	137.	113.2	2.14	33.1				
247	628	620	0.560	0.531	34.689	27.825	37.110	45.979	208	138.	115 7	2.15	33.2	1130			
248	705	697	0.523	0.491	34.688	27.827	37.114	45.985	212	134.	117.5	2.16	33.3				
102	808	798	0.485	0.447	34.689	27.830	37.120	45.993	203	143.	121.5	2 20	33.5				
103	908	897	0.439	0.396	34.688	27.832	37.125	46.001	203	144.	123.6	2.21	33.7	1154.	2259	2355	
104	1008	996	0.402	0.354	34.687	27.834	37.129	46.008	204	143.	124.5	2.21	33.7				
105	1159	1145	0.342	0.286	34.685	27.836	37.136	46.018	206	142.	126.3	2 22	33.8				
106	1310	1293	0.282	0.218	34.681	27.837	37.140	46.026	209	139.	127.3	2 23	33.7	1136	2255	2353	
107	1510	1490	0.197	0.121	34.678	27.840	37.149	46.040	214	135.	127.9	2.20	33.5				
108	1661	1638	0.131	0.046	34.672	27.839	37.153	46.048	217	133.	127.4	2.20	33.4				
109	1812	1786	0 082	-0.012	34.672	27.842	37.159	46.058	221	130.	127.7	2 20	33.4				
110	1964	1936	0.024	-0.080	34.668	27.842	37.163	46.066	224	127.	127 1	2 19	33.4	1110	2251	2352	
111	2168	2135	-0 037	-0.154	34.665	27.844	37.169	46.076	228	124.	126.6	2.19	33.2				
112	2320	2285	-0.075	-0.202	34.664	27.845	37.174	46.083									
113	2524	2484	-0.121	-0 263	34.665	27.849	37.181	46.094	231	122.	127.5	2.19	33.1				
114	2728	2684	-0.164	-0.321	34.661	27.849	37.184	46.101	233	121.	127.3	2 18	33.0				
115	2932	2883	-0.197	-0.370	34.661	27.851	37.190	46.109	236	118.	127.3	2 17	33.0	1072.			
116	3136	3083	-0.226	-0.416	34.657	27.850	37.191	46.113	239	115.	126.2	2 17	32.8				
153	3340	3282	-0.252	-0.459	34.661	27.855	37.199	46.123	241	114.	125.6	2 17	32.8				
118	3545	3482	-0.269	-0.494	34.657	27.854	37.200	46.126	242	113.	125.1	2 16	32.8	1061			
119	3750	3681	-0 287	-0.531	34.657	27.855	37.203	46.132	244	112	124 7	2 16	32.7				
120	3954	3880	-0.304	-0.567	34.655	27.855	37.206	46.136	245	111.	124.4	2 15	32.7				
121	4158	4078	-0.312	-0.595	34.654	27.856	37.208	46.140	247	109.	125 0	2 16	32.7				
122	4362	4276	-0.318	-0 621	34.654	27.857	37.211	46.144	247	109.	125.7	2 15	32.7	1055.	2243	2352	
123	4565	4474	-0.324	-0.648	34.650	27.855	37.210	46.145	248	109.	127.1	2.15	32.7	1049.	2243	2353	
124	4755	4658	-0.357	-0.701	34.652	27.859	37.217	46.155	249	108.	131 0	2 17	32.8	1042.	2241	2352	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 92 Latitude 68- 0.0 S Longitude 0-20.3 W Date 1/28/84 Bottom Depth 4415 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	1	-9	0.869	0.869	33.793	27.083	36.364	45.229	361	-16	62 6	1 42	23 [illegible]				
117	4	4	0.439	0.439	33.794	27.109	36.415	45.303	364	-15				694			
231	27	27	0.089	0.088	33.798	27.131	36.457	45.365	366	-14	62 4	1 48	24 1				
232	60	60	-1.445	-1.446	34.407	27.689	37.097	46.081	309	56	79 3	1 95	29 6				
233	89	88	-1 144	-1.146	34.487	27.743	37.131	46.097	282	80	87.6	2 02	30 9				
234	118	117	-0 228	-0.232	34.603	27.798	37 129	46.041	237	116	97 4	2 08	32 3				
235	147	146	0.334	0.328	34.651	27.806	37.104	45.984	219	129	102.5	2 12	32 7				
236	177	175	0.471	0.464	34.667	27.811	37.101	45.974	214	132.	105.3	2.05	32 7				
237	217	214	0.451	0.442	34.668	27 813	37.104	45.978	214	132.	106.3	2.04	32.7				
238	256	254	0.465	0.454	34.673	27.817	37.106	45.980	212	134	107.3	2.07	32 8				
239	297	294	0.472	0.460	34.674	27.817	37.107	45.980	212	134.	108 9	2 05	32 8				
240	347	344	0.495	0.480	34.678	27.819	37.107	45.979	210	136	110.2	2 06	32.8				
241	398	394	0.510	0.493	34.680	27.820	37.107	45.979	211	135.	111 1	2 06	32.9				
242	449	444	0.517	0.497	34.683	27.822	37.109	45.980	209	137.	112 4	2 07	33.0				
243	499	494	0.513	0.491	34.686	27.825	37 113	45.984	208	138.	114.2	2 08	33.0				
244	550	544	0.497	0.473	34.686	27.826	37.115	45.987	208	138	115.1	2 09	33.1				
245	600	593	0.494	0.467	34.688	27.828	37.117	45.989	207	139	116.6	2 11	33.2				
246	676	668	0.477	0.446	34.688	27.829	37.119	45.993	206	140	118.4	2 12	33.3				
247	752	743	0.459	0.425	34.690	27.832	37.124	45.998	206	141	120 2	2 12	33.3				
248	797	788	0.448	0.411	34.691	27.834	37.126	46.001	205	142	121.0	2.15	33.3				
102	856	845	0.428	0.388	34.685	27.830	37.124	46.000	205	142.							
103	956	944	0.392	0.347	34.685	27.833	37.129	46.007	207	140.							
104	1105	1091	0.330	0.277	34.684	27.836	37.136	46.018	209	139							
105	1255	1239	0.257	0.196	34.680	27.837	37.142	46.029	212	137.	126.8	2.13	33 5				
106	1405	1387	0.194	0.125	34.679	27.840	37.149	46.040	216	133.	127.3	2.17	33.5				
107	1556	1535	0.130	0.052	34.676	27.842	37.155	46.050	219	131.	126 7	2.16	33 4				
108	1705	1682	0.072	-0.015	34.673	27.843	37.160	46.059	222	129	127.7	2.17	33 3				
109	1855	1828	0.014	-0.082	34.670	27.844	37.165	46.068	224	127.							
110	2005	1976	-0.037	-0.142	34.669	27.846	37.171	46.077	226	126.							
111	2157	2125	-0.075	-0.191	34.666	27.846	37.174	46.083	229	123.							
112	2311	2276	-0.117	-0.243	34.664	27.847	37.178	46.090	232	121.							
113	2464	2426	-0.153	-0.290	34.663	27.849	37.182	46.097	233	120.	127.3	2.15	33.0				
114	2616	2574	-0.180	-0 328	34.664	27.852	37.187	46.104	236	118.	127.4	2.16	32.9				
115	2766	2721	-0 205	-0.364	34.663	27.853	37.190	46.109	236	118.	126.2	2.16	32.8				
116	2916	2867	-0.229	-0.400	34.662	27.854	37.194	46.114	239	115.	126.2	2.15	32.8				
153	3121	3068	-0.254	-0.442	34.660	27.854	37.197	46.120	240	115.							
118	3326	3268	-0.282	-0.487	34.658	27.854	37.200	46.125	242	113.							
119	3530	3466	-0.300	-0.523	34.657	27.855	37.203	46.130	244	111.							
120	3734	3666	-0.313	-0.554	34.658	27.857	37.207	46.136	245	111.							
121	3939	3865	-0.324	-0.585	34.654	27.855	37 207	46.138	247	109.							
122	4144	4064	-0.330	-0.611	34.654	27.857	37.210	46.142	248	108.	125.4	2.14	32.5				
123	4352	4266	-0.333	-0.635	34.654	27.858	37.212	46.146	249	108.	126.3	2.15	32.6				
124	4493	4403	-0.365	-0.680	34.654	27.860	37.217	46.153	249	108.	130.2	2.15	32.6				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 93 Latitude 68-38.1 S Longitude 0-23.5 W Date 1/28/84 Bottom Depth 4114 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	1	1	0.607	0.607	34.023	27.284	36.576	45.451	366	-19.	61.9	1.53	24.5				
117	2	2	0.619	0.619	34.026	27.286	36.577	45.452	365	-18.	62.5	1.50	24.3	706.	2151.	2312	
232	30	29	-0.211	-0.212	34.019	27.325	36.665	45.585	364	-10.	61.9	1.61	25.1	724.	2156.	2314	
233	61	60	-1.518	-1.519	34.355	27.648	37.062	46.052	315	51.	76.9	1.97	29.3				
234	90	89	-0.985	-0.987	34.501	27.748	37.127	46.083	267	93.	86.7	2.09	31.5	1120.	2227.	2323	
235	119	117	-0 107	-0 111	34.577	27.771	37 095	46.001	238	114	92 4	2 13	32.2				
236	148	146	0.432	0.426	34.632	27.785	37.078	45.953	219	128.	96.8	2.14	32.8				
237	177	175	0.645	0.638	34.655	27.791	37.071	45.934	211	134.	98.7	2.15	32.9				
238	217	215	0.794	0.784	34.676	27.799	37.070	45.925	206	137.	101.7	2.16	32.9	1121.	2253.	2352.	
240	257	254	0.798	0.787	34.684	27.805	37.076	45.931	205	138.	103.1	2.16	32.9				
241	297	294	0.773	0.760	34.687	27.809	37.081	45.938	206	138.	104.7	2.17	32.8				
242	348	344	0.752	0.736	34.690	27.813	37.087	45.944	207	137.	106.1	2.16	32.8				
243	398	394	0.729	0.711	34.692	27.817	37.091	45.950	207	137.	107.7	2.17	32.8				
244	449	444	0.713	0.693	34.694	27.819	37.095	45.955	206	138.	109.4	2.15	32.8				
245	500	494	0.634	0.611	34.692	27.823	37.103	45.967	209	136.	109.4	2.16	32.9	1113.	2254.	2355	
246	576	569	0.668	0.641	34.696	27.824	37.103	45.965	208	137.	112.5	2.16	32.9				
247	650	643	0.636	0.606	34.696	27.826	37.107	45.972	207	138.	114.6	2.17	33.0				
248	726	717	0.587	0.553	34.696	27.829	37.113	45.981	207	138.	116.3	2.17	33.0				
102	806	796	0.534	0.496	34.692	27.830	37.117	45.987	206	140.	119.5	2.16	33.0				
103	856	846	0.512	0.472	34.692	27.831	37.119	45.991	206	140.				1123.	2257.	2357	
104	956	945	0.463	0.417	34.690	27.833	37.124	45.999	208	139.	122.6	2.19	33.3				
105	1056	1043	0.413	0.362	34.689	27.835	37.130	46.008	208	139.	123.7	2.19	33.4				
106	1158	1143	0.363	0.307	34.687	27.837	37.135	46.016	209	139.	125.2	2.22	33.3				
107	1257	1241	0.318	0.256	34.687	27.839	37.141	46.024	211	137.	125.8	2.23	33.3	1127.	2258.	2358	
108	1409	1391	0.245	0.175	34.681	27.839	37.145	46.033	214	135.	126.3	2.22	33.3				
109	1562	1541	0.180	0.101	34.678	27.841	37.151	46.044	216	134.	127.5	2.21	33.3				
110	1714	1690	0 114	0.026	34.675	27.843	37.157	46.054	219	131.	128.0	2.22	33.2	1104	2254	2357	
111	1865	1838	0.051	-0.046	34.672	27.844	37.163	46.064	223	128.	127.6	2.21	33.2				
112	2016	1987	0.001	-0.106	34.671	27.846	37.169	46.073	226	126.	127.0	2.20	33.0				
113	2218	2184	-0.066	-0.186	34.667	27.847	37.174	46.083	229	123.	127.0	2.19	33.0	1089.	2253.	2358	
114	2419	2381	-0.116	-0.250	34.665	27.849	37.180	46.092	233	120.	126.6	2.19	33.0				
115	2621	2579	-0.159	-0.308	34.665	27.852	37.186	46.101	235	118.	126.4	2.17	32.9				
116	2823	2777	-0.202	-0.366	34.661	27.851	37.189	46.108	239	115.	125.4	2.19	32.8				
153	3026	2975	-0.229	-0.409	34.662	27.854	37.195	46.116	240	114.	124.9	2.18	32.7	1067.	2249.	2356	
118	3230	3174	-0.253	-0.450	34.660	27.854	37.197	46.121	242	113.	123.9	2.18	32.7				
119	3431	3371	-0.267	-0.482	34.658	27.854	37.199	46.124	244	111.	124.1	2.18	32.6				
120	3634	3568	-0.278	-0.511	34.658	27.855	37.202	46.129	245	110.	124.3	2.18	32.6				
121	3837	3766	-0.286	-0.538	34.657	27.856	37.204	46.133	247	109.	124.6	2 17	32.5	1053.	2247.	2356	
122	4041	3964	-0.293	-0.565	34.657	27.857	37.207	46.137									
124	4182	4101	-0.330	-0.615	34.657	27.859	37.212	46.145	248	108.	128.4	2.17	32.5				
123	4184	4103	-0.332	-0.617	34.657	27.859	37.213	46.146	249	107.	128.8	2.17	32.6	1052.	2247.	2357	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 94 Latitude 69-21.8 S Longitude 0-19.1 W Date 1/29/84 Bottom Depth 2034 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	2	2	0.126	0.126	34.104	27.376	36.695	45.595	366	-15.	54.4	1.52	23.4				
102	31	30	-0.201	-0.202	34.139	27.421	36.759	45.677	359	-5.	58.7	1.66	24.5				
103	60	60	-0.912	-0.914	34.249	27.542	36.920	45.876	337	23.	66.6	1.87	27.1				
104	90	89	-1.727	-1.729	34.390	27.683	37.109	46.110	318	50.	69.7	2.05	30.3				
105	130	128	-1.572	-1.575	34.428	27.709	37.125	46.117	305	61.	73.0	2.07	30.8				
106	170	168	-1.516	-1.520	34.459	27.733	37.145	46.133	298	68.	75.9	2.07	30.9				
107	209	207	-1.212	-1.218	34.484	27.743	37.136	46.106	287	76.	78.6	2.08	31.0				
108	259	257	-0.706	-0.714	34.537	27.766	37.128	46.068	267	91.	84.8	2.11	31.4				
109	309	306	-0.305	-0.316	34.582	27.785	37.121	46.038	249	105.	89.4	2.11	31.6				
110	359	355	0.313	0.298	34.632	27.793	37.092	45.975	225	123.	95.4	2.14	32.2				
111	409	404	0.454	0.437	34.651	27.800	37.091	45.966	219	128.	98.5	2.14	32.4				
112	458	453	0.584	0.564	34.670	27.808	37.091	45.958	214	131.	101.8	2.17	32.5				
113	507	501	0.694	0.671	34.680	27.809	37.087	45.948	210	134.	105.0	2.17	32.7				
114	557	550	0.658	0.633	34.681	27.812	37.092	45.955	210	135.	106.1	2.17	32.4				
115	606	599	0.568	0.540	34.679	27.816	37.101	45.970	213	133.	107.9	2.16	32.3				
116	665	657	0.550	0.520	34.679	27.818	37.104	45.973	213	133.	108.7	2.16	32.5				
153	744	735	0.447	0.413	34.674	27.820	37.112	45.988	216	131.	110.9	2.16	32.5				
118	842	832	0.432	0.393	34.680	27.826	37.119	45.996	215	132.	113.9	2.18	32.5				
119	963	951	0.390	0.345	34.679	27.828	37.124	46.003	214	133.	116.2	2.19	32.7				
120	1109	1095	0.330	0.277	34.681	27.833	37.133	46.016	215	133.	119.5	2.21	32.8				
121	1306	1289	0.236	0.172	34.677	27.836	37.142	46.031	217	132.	121.1	2.21	32.9				
122	1555	1534	0.121	0.043	34.674	27.841	37.155	46.050	222	128.	123.0	2.20	32.8				
123	1807	1782	0.023	-0.070	34.670	27.844	37.164	46.066	226	125.	123.9	2.20	32.9				
124	2055	2025	-0.036	-0.145	34.668	27.846	37.171	46.077	228	124.	124.2	2.20	32.9				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 95 Latitude 65-33.6 S Longitude 8-32.9 W Date 1/30/84 Bottom Depth 4994 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
225	2	1	0.621	0.621	34.042	27.299	36.589	45.464									
226	2	1	0.563	0.563	34.039	27.300	36.594	45.471	356	-9.	53.5	1.44	22.7	667.	2142.	2314	
117	3	3	0.603	0.603	34.024	27.285	36.577	45.453	358	-11.	52.4	1.36	22.3				
227	40	40	-0.154	-0.155	34.056	27.352	36.688	45.605	354	0.	55.1	1.53	23.2				
228	77	77	-1.522	-1.524	34.381	27.670	37.083	46.073									
229	78	77	-1.522	-1.524	34.380	27.669	37.082	46.072	311	55.	73.8	2.01	29.9	931.	2206.	2329	
230	102	101	-1.259	-1.262	34.432	27.703	37.099	46.072	293	70.	78.3	2.06	30.8				
231	150	148	-0.054	-0.059	34.563	27.757	37.078	45.981	243	108.	91.8	2.18	32.8				
232	199	197	0.856	0.847	34.688	27.805	37.071	45.923	204	139.	105.4	2.23	33.6				
233	249	247	0.783	0.772	34.687	27.809	37.080	45.936	202	141.	108.8	2.22	33.6	1134.	2254.	2352	
234	300	296	0.717	0.704	34.689	27.815	37.090	45.949	203	141.	111.7	2.23	33.6				
235	349	345	0.665	0.650	34.688	27.817	37.095	45.958	204	141.	114.0	2.23	33.8				
236	400	395	0.589	0.571	34.687	27.821	37.104	45.970	204	141.	116.0	2.25	33.8				
238	449	445	0.554	0.534	34.687	27.823	37.108	45.977	205	141.	117.2	2.25	33.8				
237	450	445	0.555	0.535	34.689	27.825	37.110	45.978									
239	550	544	0.479	0.455	34.685	27.827	37.116	45.989	204	142.	120.0	2.26	34.1				
240	651	644	0.424	0.395	34.684	27.829	37.122	45.999	202	145.	122.6	2.27	34.4				
241	750	742	0.383	0.349	34.682	27.830	37.126	46.005	205	142.	123.6	2.27	34.4				
242	851	841	0.348	0.309	34.685	27.835	37.133	46.014	206	142.				1176.	2262.	2355	
243	951	939	0.311	0.267	34.683	27.836	37.136	46.019	209	139.	125.8	2.28	34.4				
245	1052	1039	0.272	0.223	34.682	27.837	37.140	46.026	210	138.	127.0	2.26	34.3				
244	1052	1039	0.272	0.223	34.683	27.838	37.141	46.027									
246	1147	1133	0.230	0.176	34.680	27.838	37.144	46.033	213	136.	126.8	2.27	34.2				
247	1246	1230	0.182	0.122	34.679	27.841	37.149	46.041	214	135.	127.0	2.25	34.1				
248	1395	1377	0.127	0.059	34.677	27.842	37.155	46.050	218	132.	127.4	2.28	34.0				
103	1563	1542	0.066	-0.012	34.672	27.842	37.159	46.058	219	132.	129.2	2.22	33.7	1107.	2256.	2358	
102	1563	1542	0.065	-0.013	34.672	27.842	37.159	46.058									
104	1715	1691	0.000	-0.086	34.671	27.845	37.167	46.070	222	129.	130.0	2.22	33.7				
105	1866	1840	-0.038	-0.134	34.668	27.845	37.169	46.075	226	126.	129.4	2.22	33.5	1103.	2252.	2355	
106	2018	1989	-0.087	-0.193	34.667	27.847	37.175	46.084	228	124.	129.3	2.22	33.4				
107	2216	2183	-0.135	-0.254	34.666	27.850	37.181	46.093	230	123.	129.3	2.21	33.4				
108	2418	2381	-0.183	-0.316	34.661	27.849	37.184	46.100	234	120.	128.7	2.21	33.2				
109	2619	2578	-0.219	-0.367	34.660	27.850	37.188	46.107	235	119.	128.5	2.21	33.1	1074.	2247.	2353	
111	2822	2776	-0.250	-0.413	34.661	27.853	37.194	46.116	238	116.	128.6	2.21	33.0				
110	2822	2776	-0.250	-0.413	34.659	27.852	37.193	46.114									
112	3025	2975	-0.277	-0.456	34.659	27.854	37.197	46.121	240	115.	128.0	2.22	32.9	1070.	2243.	2350	
113	3279	3223	-0.304	-0.504	34.658	27.855	37.202	46.128	242	113.	127.5	2.20	32.9				
115	3531	3469	-0.329	-0.551	34.657	27.857	37.206	46.135	245	111.	126.5	2.20	32.8				
114	3532	3469	-0.329	-0.551	34.656	27.856	37.205	46.134									
116	3784	3715	-0.347	-0.592	34.655	27.857	37.208	46.140	247	109.	126.1	2.20	32.8				
153	4038	3962	-0.366	-0.635	34.653	27.857	37.211	46.145	248	109.	124.5	2.21	32.9	1045.	2242.	2352	
119	4289	4205	-0.373	-0.667	34.654	27.859	37.216	46.151	249	108.	126.2	2.22	32.8				
118	4289	4206	-0.373	-0.667	34.652	27.858	37.214	46.150									
120	4541	4450	-0.392	-0.712	34.653	27.860	37.219	46.158	251	106.	123.8	2.21	33.0	1055.	2242.	2350	
122	4846	4746	-0.462	-0.812	34.649	27.861	37.226	46.171	254	104.	120.4	2.20	32.9				
121	4847	4747	-0.462	-0.812	34.651	27.863	37.228	46.172									
123	5080	4973	-0.462	-0.838	34.650	27.863	37.230	46.175									
124	5082	4975	-0.462	-0.838	34.652	27.865	37.231	46.177	255	104.	124.4	2.20	32.9	1036.	2241.	2352	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 96 Latitude 63- 9.2 S Longitude 14-44.2 W Date 1/31/84 Bottom Depth 5125 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
325	1	-9	0.704	0.704	33.855	27.143	36.432	45.305	385	-39.	57.8	1.22	19.2				
117	4	4	0.724	0.724	33.853	27.140	36.428	45.300	384	-38.	60.3	1.23	19.0	578.	2110.	2303	
329	29	28	-0.104	-0.105	33.961	27.273	36.607	45.523	362	-9.	63.6	1.55	22.4				
330	55	55	-1.685	-1.686	34.379	27.673	37.096	46.096	330	38.	73.6	1.94	28.0	872.	2194.	2326	
332	80	79	-1.543	-1.545	34.425	27.706	37.120	46.110	311	55.	78.8	2.02	29.4				
331	80	80	-1.611	-1.613	34.418	27.703	37.121	46.115	311	56.	78.8	2.02	29.3				
333	105	104	-1.281	-1.284	34.466	27.731	37.128	46.102	293	70.	84.3	2.07	30.6				
275	112	111	-0.844	-0.847	34.510	27.750	37.120	46.068									
334	128	127	-0.430	-0.434	34.580	27.789	37.132	46.056	237	118.	101.9	2.20	32.6				
276	160	158	0.528	0.521	34.666	27.807	37.093	45.963									
335	177	176	0.503	0.496	34.666	27.809	37.096	45.967	205	141.	111.9	2.26	33.3				
336	227	225	0.536	0.527	34.679	27.817	37.103	45.972	202	144.	116.0	2.25	33.3	1152.	2249.	2344	
337	276	274	0.490	0.478	34.680	27.821	37.109	45.981	201	145.	120.0	2.26	33.6				
277	314	311	0.471	0.458	34.684	27.825	37.115	45.988									
338	326	323	0.448	0.434	34.682	27.825	37.116	45.990	200	147.	122.9	2.29	33.7				
339	377	373	0.424	0.408	34.684	27.828	37.120	45.996	200	147.	124.2	2.29	33.8				
340	428	423	0.394	0.376	34.682	27.829	37.123	46.000	199	148.	126.1	2.31	34.0				
341	477	472	0.369	0.349	34.683	27.831	37.127	46.006	199	148.	127.2	2.31	34.1				
342	528	522	0.364	0.341	34.683	27.831	37.128	46.007	199	148.	128.1	2.31	34.1	1183.	2255.	2347	
343	579	572	0.335	0.310	34.683	27.833	37.131	46.012	201	147.	128.1	2.31	34.1				
344	654	647	0.306	0.277	34.682	27.834	37.134	46.017	202	146.	129.4	2.31	34.0				
345	730	722	0.277	0.245	34.681	27.835	37.137	46.022	203	145.	129.6	2.30	33.9				
346	805	796	0.244	0.208	34.680	27.837	37.141	46.027	206	143.	130.2	2.29	33.7				
347	906	895	0.199	0.158	34.679	27.839	37.145	46.035	209	140.	130.6	2.29	33.7				
348	1005	993	0.154	0.108	34.677	27.840	37.149	46.042	212	138.	130.5	2.30	33.4				
102	1110	1096	0.095	0.044	34.674	27.841	37.154	46.050	216	134.	131.8	2.26	33.1				
103	1261	1245	0.035	-0.024	34.670	27.841	37.159	46.058	219	132.	131.4	2.25	33.0	1121.	2248.	2348	
104	1412	1394	-0.031	-0.098	34.667	27.843	37.165	46.068	223	128.	130.3	2.25	32.7				
105	1563	1543	-0.079	-0.155	34.666	27.845	37.170	46.077	227	125.	130.0	2.24	32.8				
106	1715	1692	-0.114	-0.199	34.666	27.847	37.175	46.084	229	123.	130.1	2.25	32.8	1105.	2245.	2347	
107	1865	1839	-0.158	-0.252	34.662	27.846	37.178	46.090	232	121.	129.3	2.24	32.7				
108	2017	1988	-0.193	-0.297	34.661	27.848	37.182	46.097	235	118.	128.8	2.25	32.7				
109	2219	2186	-0.223	-0.340	34.660	27.849	37.186	46.103	237	117.	128.5	2.24	32.7	1084.	2243.	2348	
110	2422	2386	-0.256	-0.388	34.658	27.850	37.189	46.109	239	115.	128.6	2.26	32.7				
111	2625	2584	-0.281	-0.428	34.658	27.852	37.193	46.116	240	115.	128.0	2.24	32.6				
112	2828	2782	-0.297	-0.459	34.658	27.853	37.197	46.121	240	115.	127.2	2.23	32.5	1069.	2236.	2342	
113	3028	2978	-0.322	-0.500	34.657	27.854	37.200	46.127	242	113.	126.3	2.22	32.5				
114	3283	3227	-0.349	-0.548	34.657	27.856	37.205	46.135	244	112.	125.4	2.22	32.5				
115	3538	3476	-0.376	-0.598	34.655	27.857	37.209	46.141	246	110.	125.2	2.21	32.3				
116	3793	3724	-0.399	-0.644	34.654	27.858	37.213	46.148	249	108.	125.3	2.21	32.3	1045.	2234.	2343	
153	4048	3972	-0.426	-0.694	34.652	27.859	37.217	46.154	250	107.	124.6	2.20	32.3				
118	4304	4221	-0.478	-0.770	34.649	27.860	37.222	46.164	253	105.	119.0	2.18	32.1				
119	4560	4469	-0.507	-0.825	34.646	27.859	37.225	46.170	255	103.	117.5	2.18	32.1				
120	4816	4718	-0.503	-0.848	34.647	27.861	37.229	46.175	256	103.	118.6	2.18	32.1	1037			
122	5073	4967	-0.491	-0.865	34.647	27.862	37.230	46.177	257	102.	119.7	2.18	32.1				
121	5073	4967	-0.491	-0.865	34.646	27.861	37.229	46.177	257	102.	119.4	2.17	32.1	1027.	2235	2347	
123	5218	5107	-0.494	-0.884	34.642	27.859	37.228	46.177	258	101.	118.3	2.19	32.3	1040.	2233.	2343	
124	5218	5107	-0.494	-0.884	34.644	27.860	37.230	46.178	256	103.	118.4	2.19	32.3				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 97 Latitude 62-22.4 S Longitude 15-41.4 W Date 2/ 1/84 Bottom Depth 5079 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	2	2	0.599	0.599	33.627	26.966	36.265	45.147	384	-36.	55.8	1.00	15.9				
117	3	3	0.622	0.622	33.632	26.968	36.266	45.147	382	-34.	56.5	0.96	15.9				
232	28	28	-0.729	-0.730	33.879	27.234	36.608	45.560	351	9.	70.0	1.59	22.1				
233	53	53	-1.702	-1.703	34.390	27.682	37.107	46.107	317	51.	82.2	1.95	28.7				
234	78	77	-1.664	-1.666	34.424	27.709	37.130	46.128	309	58.	84.3	1.97	29.3				
235	103	102	-1.550	-1.552	34.466	27.740	37.153	46.143	299	67.	87.4	2.01	30.0				
236	127	126	-0.663	-0.667	34.558	27.782	37.140	46.077	248	109.	102.2	2.12	32.1				
237	151	150	0.049	0.043	34.627	27.803	37.117	46.014	219	131.	111.1	2.18	33.1				
238	180	178	0.521	0.514	34.677	27.817	37.103	45.973	200	146.	118.5	2.21	33.6				
239	220	218	0.526	0.517	34.684	27.822	37.108	45.978	200	146.	121.1	2.25	33.8				
240	260	258	0.439	0.428	34.685	27.828	37.119	45.994	199	148.	123.8	2.26	33.9				
241	301	298	0.437	0.424	34.681	27.825	37.116	45.991	198	149.	126.1	2.26	34.0				
242	352	348	0.409	0.394	34.686	27.831	37.124	46.000	197	150.	127.7	2.26	34.2				
243	402	398	0.377	0.360	34.682	27.830	37.125	46.003	196	151.	128.9	2.27	34.3				
244	452	447	0.362	0.343	34.686	27.834	37.130	46.009	197	150.	130.0	2.32	34.3				
245	528	523	0.303	0.281	34.683	27.835	37.135	46.017	199	149.	131.3	2.27	34.3				
246	603	597	0.284	0.258	34.682	27.835	37.136	46.020	200	148.	132.0	2.27	34.2				
247	679	671	0.232	0.203	34.678	27.835	37.140	46.026	203	146.	132.9	2.30	34.1				
248	754	745	0.206	0.173	34.676	27.835	37.141	46.030	205	144.	133.1	2.30	34.0				
102	856	846	0.178	0.140	34.678	27.839	37.147	46.037	209	140.	135.0	2.28	33.8				
103	957	946	0.119	0.076	34.675	27.840	37.152	46.045	211	139.	135.0	2.26	33.8				
104	1058	1045	0.067	0.019	34.672	27.840	37.156	46.053	216	134.	134.0	2.24	33.7				
105	1210	1195	0.015	-0.041	34.670	27.842	37.161	46.061	219	132.	134.6	2.24	33.6				
106	1362	1345	-0.045	-0.109	34.668	27.844	37.167	46.071	224	128.	134.3	2.25	33.5				
107	1513	1493	-0.103	-0.175	34.666	27.846	37.172	46.080	227	125.	131.2	2.24	33.4				
108	1666	1643	-0.150	-0.231	34.661	27.845	37.175	46.086									
109	1817	1792	-0.179	-0.270	34.661	27.846	37.179	46.092	233	120.	131.7	2.22	33.2				
110	1969	1941	-0.208	-0.308	34.661	27.848	37.183	46.099	235	118.	131.5	2.24	33.2				
111	2171	2140	-0.236	-0.350	34.659	27.849	37.186	46.104	239	115.	130.9	2.21	33.0				
112	2373	2337	-0.261	-0.389	34.661	27.852	37.192	46.112	239	115.	131.6	2.22	33.0				
113	2575	2535	-0.284	-0.427	34.658	27.852	37.193	46.115	242	113.	131.8	2.22	32.9				
114	2769	2726	-0.304	-0.462	34.657	27.852	37.196	46.120	239	116.	131.4	2.21	32.8				
115	2981	2932	-0.326	-0.500	34.658	27.855	37.201	46.127	241	114.	130.6	2.22	32.6				
116	3235	3181	-0.356	-0.551	34.656	27.856	37.205	46.134	244	112.	130.5	2.21	32.6				
153	3490	3429	-0.386	-0.603	34.653	27.856	37.208	46.140	248	108.	130.3	2.22	32.5				
118	3745	3678	-0.419	-0.659	34.652	27.857	37.213	46.148	248	109.	129.5	2.21	32.5				
119	4000	3925	-0.477	-0.739	34.648	27.857	37 218	46.158	252	106	125.4	2 20	32 5				
120	4257	4176	-0.541	-0.827	34.642	27.856	37.222	46.167	256	102	120 1	2 18	32.1				
121	4513	4424	-0.552	-0.863	34.642	27.858	37.226	46.173	257	102.	120.1	2.17	32.2				
122	4746	4650	-0.556	-0.892	34.641	27.858	37.228	46.177	258	101.	120.4	2.17	32.1				
123	4977	4874	-0.558	-0.919	34.640	27.858	37.230	46.181	259	100.	120.2	2.18	32.2				
124	5175	5066	-0.560	-0.943	34.637	27.857	37.230	46.182	260	100.	119.4	2.16	32.1				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 98 Latitude 61-29.4 S Longitude 16-41.4 W Date 2/ 1/84 Bottom Depth 4359 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
225	1	1	0.384	0.384	33.623	26.974	36.286	45.180	376	-26.	61.0	1.10	16.6				
226	1	1	0.385	0.385	33.623	26.974	36.286	45.180	378	-28.	60.1	1.10	16.6	539.	2086.	2288.	2083
117	4	4	0.381	0.381	33 623	26 975	36.286	45.181	377	-27	61.4	1 13	16 5				
229	26	25	0.369	0.368	33.657	27.003	36.315	45.209	376	-26.	62.1	1.16	17.7	557.	2094.	2291	
230	54	54	-1.768	-1.769	34.352	27.653	37.083	46.087	317	52.	86.6	1.96	28.4				
232	74	74	-1.745	-1.747	34.417	27.705	37.132	46.134	309	59.	87.3	1.99	29.3	935.	2207.	2330.	2203.
231	74	74	-1.740	-1.742	34.408	27.698	37.125	46.127	311	57.	89.6	1.99	29.2				
233	94	93	-1.538	-1.540	34.455	27.731	37.144	46.133	297	69.	92.2	2.00	30.0				
234	123	122	-1.032	-1.035	34.519	27.765	37.146	46.105	271	90.	102.3	2.11	31.3				
235	153	151	-0.382	-0.387	34.594	27.798	37.138	46.060	236	118.	113.7	2.21	32.6				
236	182	180	-0.021	-0.028	34.632	27.811	37.129	46.030	221	130.	118.8	2.24	33.1	1136.	2243.	2340	
237	222	220	0.184	0.175	34.659	27.821	37.128	46.016	210	139.	122.6	2.25	33.6				
238	262	259	0.262	0.252	34.670	27.826	37.127	46.012	204	144.	126.0	2.26	33.9				
239	302	299	0.255	0.243	34.672	27.828	37.130	46.015	204	144.	126.4	2.27	34.0				
240	353	349	0.260	0.246	34.676	27.831	37.133	46.018	202	146.	127.9	2.28	34.0				
242	404	399	0.229	0.213	34.677	27.834	37.138	46.024	204	145.				1193.	2256.	2347.	2252
241	404	399	0.231	0.215	34.676	27.833	37.137	46.023	203	146.	129.8	2.29	34.1				
243	455	450	0.209	0.190	34.676	27.834	37.139	46.027	204	145.	130.1	2.28	33.9				
244	505	500	0.189	0.168	34.678	27.837	37.144	46.032	206	143.	131.9	2.28	33.9				
245	556	550	0.164	0.141	34.676	27.837	37.145	46.035	208	141.	132.2	2.27	33.9				
246	556	550	0.164	0.141	34.678	27.839	37.147	46.037	208	141.				1174.	2252.	2345.	2254.
247	631	624	0.156	0.129	34.676	27.838	37.146	46.037	209	140.	133.1	2.27	33.9				
248	707	699	0.103	0.073	34.673	27.838	37.150	46.044	213	137.	133.2	2.26	33.6				
102	808	798	0.065	0.030	34.672	27.840	37.154	46.051	216	134.	135.9	2.28	33.4	1146.	2251.	2348.	
103	909	898	0.039	-0.001	34.671	27.841	37.157	46.055	218	133.	135.9	2.28	33.3				
104	1010	998	-0.005	-0.050	34.671	27.843	37.162	46.063	222	129.	134.3	2.28	33.3				
105	1111	1097	-0.034	-0.084	34.669	27.844	37.165	46.068	223	128.	133.9	2.27	33.3	1124.	2249.	2348.	2250
106	1263	1247	-0.076	-0.134	34.668	27.845	37.169	46.075	226	126.	134.1	2.27	33.3				
107	1414	1396	-0.146	-0.212	34.664	27.846	37.175	46.085	232	121.	133.0	2.27	33.3	1104.	2244.	2346	
108	1566	1546	-0.189	-0.264	34.661	27.846	37.178	46.091	234	119.	132.8	2.26	33.2				
109	1717	1694	-0.220	-0.304	34.661	27.848	37.182	46.098	238	115.	132.4	2.27	33.1	1100.	2241.	2343	
110	1870	1844	-0.237	-0.330	34.659	27.848	37.184	46.101	239	115.	132.1	2.24	33.1				
111	2020	1991	-0.260	-0.363	34.659	27.849	37.187	46.106	240	114.	131.1	2.26	32.9	1083.	2240.	2345.	2242
112	2168	2136	-0.281	-0.394	34.658	27.850	37.190	46.110	241	113.	131.6	2.25	32.9				
113	2366	2331	-0.293	-0.420	34.660	27.853	37.194	46.116	241	113.	132.1	2.24	32.8	1079.	2239.	2344	
115	2563	2524	-0.311	-0.452	34.654	27.849	37.193	46.116	240	115.	132.0	2.23	32.6	1066.	2238.	2345.	2242
116	2766	2722	-0.339	-0.496	34.657	27.854	37.200	46.126	242	113.	130.7	2.23	32.5				
153	2970	2922	-0.362	-0.535	34.658	27.856	37.205	46.133	244	112.	129.8	2.23	32.5	1062.	2236.	2343	
118	3225	3170	-0.389	-0.583	34.655	27.856	37.207	46.139	245	111.	130.0	2.21	32.5				
119	3479	3419	-0.428	-0.643	34.653	27.857	37.212	46.147	249	108.	129.8	2.20	32.4	1045	2237	2347	
120	3732	3665	-0.480	-0.717	34.649	27.857	37.217	46.155	253	104.	126.2	2.20	32.4				
121	3984	3911	-0.551	-0.810	34.644	27.857	37.222	46.166	256	102	121.1	2.18	32.2	1039.	2233.	2343	2234
122	4238	4157	-0.566	-0.849	34.642	27.857	37.225	46.171	258	101.	119.6	2.19	32.2	1036.	2232.	2342	
123	4431	4345	-0.560	-0.863	34.641	27.857	37.225	46.172	258	101	119.5	2 17	32.2				
124	4431	4345	-0.560	-0.863	34.643	27.859	37.227	46.174	257	102	119 8	2 18	32 1	1030	2233	2344	2232

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 99 Latitude 61- 1.3 S Longitude 17-10.4 W Date 2/ 1/84 Bottom Depth 4826 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	2	2	0.855	0.855	33.657	26.974	36.258	45.126	352	-7.	54.5	1.37	21.6				
102	28	28	0.595	0.594	33.886	27.175	36.470	45.348	349	-2.	54.3	1.56	22.2				
103	82	81	-1.648	-1.650	34.333	27.635	37.057	46.054	312	55.	95.3	2.02	29.9				
104	142	141	-0.946	-0.950	34.459	27.713	37.090	46.045	279	81.	99.5	2.11	31.6				
105	203	201	-0.085	-0.092	34.577	27.770	37.093	45.998	236	116.	108.7	2.19	32.6				
106	303	300	0.306	0.294	34.655	27.812	37.111	45.993	216	132.	118.2	2.22	32.8				
107	404	400	0.354	0.337	34.675	27.825	37.122	46.001	214	133.	122.7	2.22	32.9				
108	529	523	0.210	0.183	34.671	27.830	37.136	46.024	215	134.	124.9	2.22	33.1				
109	652	645	0.200	0.172	34.676	27.835	37.141	46.030	204	145.	131.0	2.29	34.3				
110	852	843	0.110	0.073	34.674	27.839	37.151	46.045	212	138.	131.2	2.28	33.8				
111	1152	1138	-0.020	-0.072	34.668	27.842	37.163	46.065	223	128.	131.6	2.25	33.4				
112	1452	1434	-0.098	-0.167	34.667	27.846	37.172	46.080	227	125.	131.6	2.24	33.3				
113	1751	1727	-0.170	-0.256	34.664	27.848	37.180	46.092	233	120.	131.4	2.21	33.2				
114	2052	2023	-0.227	-0.333	34.661	27.849	37.186	46.102	238	116.	129.9	2.23	33.2				
115	2359	2324	-0.268	-0.395	34.659	27.851	37.191	46.111	239	115.	129.9	2.23	32.9				
116	2663	2621	-0.306	-0.455	34.655	27.850	37.194	46.118	240	115.	130.1	2.20	32.7				
153	2968	2920	-0.345	-0.518	34.656	27.854	37.202	46.129	242	113.	129.1	2.19	32.5				
118	3272	3217	-0.377	-0.575	34.655	27.856	37.207	46.137	245	111.	128.4	2.18	32.5				
119	3573	3511	-0.425	-0.648	34.653	27.858	37.213	46.148	249	108.	127.1	2.19	32.5				
120	3876	3805	-0.477	-0.727	34.647	27.856	37.216	46.156	252	105.	123.7	2.18	32.4				
121	4127	4050	-0.525	-0.798	34.645	27.858	37.222	46.165	255	103.	121.0	2.18	32.3				
122	4386	4301	-0.537	-0.836	34.646	27.860	37.226	46.172									
123	4642	4550	-0.529	-0.855	34.642	27.858	37.225	46.172	258	101.	119.2	2.17	32.2				
124	4878	4778	-0.510	-0.862	34.642	27.858	37.226	46.173	257	102.	119.0	2.14	32.2				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 100 Latitude 60-41.9 S Longitude 17-31.0 W Date 2/ 2/84 Bottom Depth 4460 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
233	3	3	0.492	0.492	33.613	26.961	36.266	45.154	350	-1.	57.8	1.49	21.1				
117	4	4	0.522	0.522	33.603	26.951	36.255	45.142	349	0.	56.7	1.53	21.1	662.	2112.	2279	
234	22	22	0.492	0.491	33.614	26.961	36.267	45.155	349	0.	57.3	1.51	21.3				
235	49	48	-1.190	-1.191	34.140	27.463	36.860	45.835	336	27.	89.4	2.01	28.1				
236	75	74	-1.399	-1.401	34.267	27.573	36.981	45.965	333	32.	95.3	2.07	29.9				
237	99	98	-1.575	-1.577	34.322	27.623	37.041	46.035	312	55.	101.1	2.08	30.2				
238	124	123	-1.478	-1.481	34.377	27.665	37.076	46.063	303	63.	100.7	2.09	30.6				
239	149	147	-1.272	-1.276	34.423	27.696	37.093	46.068	302	61.	104.1	2.11	31.2				
240	178	176	-1.040	-1.045	34.472	27.727	37.109	46.070	277	84.	107.1	2.14	31.6				
241	216	214	-0.479	-0.486	34.558	27.773	37.120	46.048	254	101.	113.7	2.21	32.3				
242	257	255	-0.074	-0.083	34.610	27.796	37.118	46.022	232	119.	117.5	2.21	32.7				
243	297	294	0.171	0.159	34.638	27.805	37.113	46.003	229	120.	119.7	2.23	32.8				
244	348	344	0.317	0.303	34.666	27.820	37.119	46.000	215	133.	122.3	2.23	32.7				
245	398	394	0.251	0.235	34.667	27.825	37.127	46.013	216	132.	123.8	2.23	32.9				
246	449	444	0.228	0.210	34.669	27.828	37.132	46.018	217	132.	125.5	2.25	33.0				
247	525	519	0.190	0.168	34.671	27.832	37.138	46.027	233	116.	127.7	2.26	33.2				
248	602	595	0.186	0.161	34.673	27.834	37.140	46.030	220	129.	128.0	2.27	33.0				
102	655	648	0.106	0.078	34.668	27.834	37.146	46.040	216	134.	130.5	2.29	33.3				
103	728	720	0.114	0.083	34.670	27.835	37.147	46.040	218	132.	130.5	2.28	33.3				
104	827	818	0.067	0.031	34.668	27.837	37.151	46.048	217	133.	131.6	2.29	33.4				
105	925	915	0.026	-0.014	34.669	27.840	37.157	46.056	219	132.	131.4	2.29	33.3				
106	1076	1063	-0.027	-0.075	34.667	27.841	37.162	46.065	226	125.	130.6	2.27	33.1				
107	1222	1207	-0.063	-0.119	34.664	27.841	37.165	46.069	228	124.	130.6	2.27	33.1				
108	1368	1351	-0.111	-0.175	34.662	27.842	37.169	46.077	230	122.	131.0	2.27	33.0				
109	1516	1496	-0.138	-0.210	34.663	27.845	37.174	46.084	231	122.	131.0	2.27	33.0				
110	1718	1695	-0.191	-0.275	34.661	27.847	37.179	46.093	235	118.	131.3	2.27	32.9				
111	1916	1889	-0.238	-0.334	34.659	27.848	37.184	46.101	238	116.	131.1	2.26	32.9				
112	2115	2085	-0.264	-0.373	34.660	27.851	37.189	46.108									
113	2318	2284	-0.301	-0.424	34.657	27.851	37.192	46.114	241	114.	130.7	2.25	32.7				
114	2518	2479	-0.330	-0.468	34.656	27.852	37.196	46.120	242	113.	129.8	2.24	32.7				
115	2721	2679	-0.358	-0.511	34.653	27.852	37.198	46.125	243	112.	129.6	2.25	32.6				
116	2928	2881	-0.385	-0.554	34.651	27.852	37.201	46.131	245	111.	128.8	2.24	32.6				
153	3129	3078	-0.406	-0.591	34.653	27.855	37.207	46.138	246	110.	129.0	2.23	32.5				
118	3336	3280	-0.443	-0.645	34.650	27.855	37.210	46.145	250	107.	126.6	2.22	32.4				
119	3541	3480	-0.473	-0.692	34.649	27.856	37.214	46.151	252	105.	124.1	2.21	32.4				
120	3747	3680	-0.499	-0.736	34.647	27.857	37.217	46.157	255	103.	122.5	2.22	32.3				
121	3955	3883	-0.503	-0.740	34.645	27.856	37.218	46.159	256	102.	122.5	2.21	32.4				
122	4160	4082	-0.504	-0.781	34.647	27.858	37.222	46.164	246	112.	124.1	2.24	32.6				
123	4367	4283	-0.499	-0.797	34.645	27.858	37.222	46.165	256	102	124.4	2.21	32.3				
124	4535	4447	-0.492	-0.808	34.644	27.857	37.222	46.166	257	101.	124.4	2.21	32.3				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 101 Latitude 60-32.3 S Longitude 18- 1.3 W Date 2/ 2/84 Bottom Depth 2818 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	4	3	1.460	1.460	33.828	27.072	36.319	45.152	346	-6.	28.7	1.36	21.1	625.	2114.	2291	
102	40	40	1.085	1.083	33.962	27.205	36.471	45.322	342	1.	38.4	1.59	22.6				
103	79	78	-0.308	-0.311	34.207	27.481	36.824	45.747	318	37.	81.5	2.07	29.9				
104	119	118	0.235	0.231	34.363	27.580	36.888	45.778	270	79.	83.6	2.17	32.5				
105	160	158	1.520	1.512	34.571	27.665	36.896	45.714	194	143.	87.7	2.29	34.3				
106	200	198	1.613	1.603	34.619	27.697	36.922	45.735	189	147.	90.9	2.26	33.9				
107	251	248	1.579	1.566	34.661	27.733	36.960	45.774	189	148.	94.6	2.24	33.3				
108	301	298	1.441	1.426	34.679	27.758	36.992	45.813	193	145.	98.2	2.19	32.8				
109	351	347	1.418	1.400	34.689	27.768	37.003	45.826	195	143.	100.1	2.18	32.5				
110	400	396	1.309	1.289	34.693	27.779	37.021	45.849	198	141.	102.5	2.17	32.5				
111	501	495	1.209	1.184	34.702	27.793	37.041	45.874	200	140.	106.3	2.16	32.4				
112	601	594	0.931	0.902	34.695	27.807	37.070	45.919	205	137.	112.5	2.16	32.5				
113	701	693	0.847	0.813	34.699	27.816	37.084	45.938	206	137.	115.3	2.18	32.4				
114	853	843	0.561	0.520	34.686	27.823	37.109	45.979	212	134.	120.2	2.21	32.5				
115	1004	992	0.473	0.425	34.690	27.832	37.124	45.998	214	133.	123.4	2.21	32.6				
116	1156	1142	0.335	0.279	34.684	27.836	37.135	46.018	217	131.	124.8	2.22	32.8				
153	1307	1291	0.177	0.114	34.675	27.838	37.147	46.039	219	130.	126.1	2.23	33.0				
118	1458	1439	0.100	0.029	34.671	27.839	37.154	46.050	222	128.	127.3	2.24	33.2				
119	1613	1592	0.047	-0.034	34.670	27.842	37.160	46.060	225	126.	128.0	2.24	33.1				
120	1815	1791	-0.050	-0.142	34.666	27.844	37.169	46.075	228	124.	129.2	2.25	33.2				
121	2018	1990	-0.125	-0.230	34.663	27.846	37.176	46.087	233	120.	129.8	2.25	33.2				
122	2221	2188	-0.135	-0.254	34.663	27.847	37.179	46.091	234	119.	129.7	2.24	33.2				
123	2422	2386	-0.201	-0.334	34.660	27.849	37.185	46.102	239	115.	129.7	2.24	33.1				
124	2667	2626	-0.240	-0.391	34.660	27.851	37.191	46.111	241	113.	129.4	2.23	33.0				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 102 Latitude 60-15.7 S Longitude 19- 8.9 W Date 2/ 2/84 Bottom Depth 3953 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	4	4	1.386	1.386	33.832	27.081	36.331	45.168	344	-4.	42.3	1.41	21.3	639.	2123.	2298	
230	7	7	1.362	1.362	33.787	27.046	36.299	45.138	345	-4.	41.9	1.57	21.0				
235	27	27	1.392	1.391	33.836	27.083	36.334	45.170	344	-4.	41.5	1.40	21.3				
236	58	57	0.787	0.785	34.066	27.308	36.589	45.454	349	-4.	51.7	1.56	23.5				
237	88	87	-0.164	-0.167	34.163	27.439	36.774	45.689	329	24.	69.3	1.98	28.1				
238	118	117	-0.382	-0.386	34.281	27.545	36.891	45.817	297	58.	80.2	2.16	31.3	1005.	2211.	2322	
239	148	146	-0.045	-0.050	34.399	27.624	36.948	45.853	264	88.	87.4	2.20	32.8				
240	177	175	0.411	0.404	34.482	27.666	36.962	45.841	240	107.	90.9	2.22	33.1				
241	216	214	0.904	0.894	34.572	27.708	36.974	45.825	217	126.	93.4	2.23	33.4				
242	257	254	1.101	1.089	34.620	27.734	36.988	45.828	206	135.	97.0	2.22	33.2				
243	298	295	1.141	1.127	34.644	27.751	37.002	45.840	204	136.	99.5	2.21	33.0	1105.	2249.	2350	
244	348	345	1.129	1.112	34.669	27.772	37.024	45.862	203	137.	103.6	2.19	32.8				
245	399	394	1.104	1.085	34.670	27.775	37.028	45.867	203	138.	104.3	2.19	32.7				
246	450	445	0.908	0.887	34.669	27.787	37.052	45.902	206	136.	108.2	2.18	32.7				
247	501	496	0.974	0.950	34.686	27.796	37.057	45.904	205	137.	110.4	2.19	32.5				
248	551	545	0.962	0.935	34.690	27.801	37.062	45.909	203	139.	111.8	2.18	32.5				
102	555	550	0.967	0.940	34.694	27.803	37.065	45.911	204	138.	111.1	2.17	32.5				
103	606	599	0.914	0.885	34.695	27.808	37.073	45.922	205	137.	117.2	2.18	32.5				
104	656	649	0.920	0.888	34.702	27.813	37.078	45.927	204	138.	118.4	2.17	32.3				
105	706	699	0.888	0.853	34.703	27.816	37.083	45.934	205	138.	119.7	2.17	32.4				
106	807	798	0.780	0.741	34.697	27.819	37.091	45.949	208	136.	123.7	2.18	32.5	1077.	2251.	2357	
107	908	898	0.673	0.629	34.690	27.820	37.099	45.963	210	135.	127.4	2.22	32.6				
108	1009	997	0.549	0.500	34.684	27.823	37.110	45.980	212	134.	129.4	2.21	32.8	1098.	2251.	2354	
109	1110	1097	0.467	0.413	34.682	27.827	37.119	45.994	214	133.	130.4	2.21	32.7				
110	1262	1246	0.343	0.281	34.679	27.832	37.131	46.014	217	131.	131.8	2.20	32.9				
111	1414	1396	0.231	0.161	34.675	27.835	37.142	46.031	218	131.	133.5	2.22	33.0				
112	1564	1544	0.171	0.092	34.672	27.837	37.147	46.040	222	128.	134.3	2.22	33.0				
113	1715	1692	0.090	0.002	34.671	27.841	37.157	46.055	222	129.	135.6	2.23	33.2	1111.	2252.	2354	
114	1866	1840	0.038	-0.059	34.664	27.838	37.158	46.060	225	126.	136.2	2.23	33.3				
115	2017	1989	-0.018	-0.125	34.665	27.842	37.166	46.071	228	124.	136.3	2.24	33.2				
116	2220	2188	-0.085	-0.205	34.662	27.844	37.173	46.082	231	121.	137.0	2.24	33.1				
153	2423	2386	-0.127	-0.261	34.662	27.847	37.179	46.091	235	118.	131.7	2.23	33.1	1101.	2249.	2352	
118	2626	2586	-0.161	-0.310	34.659	27.847	37.182	46.097	236	117.	132.2	2.22	33.0				
119	2827	2782	-0.183	-0.348	34.659	27.849	37.186	46.103	239	115.	132.3	2.22	33.0				
120	3031	2981	-0.200	-0.381	34.657	27.849	37.188	46.107	240	114.	130.5	2.21	32.9				
121	3232	3179	-0.224	-0.422	34.656	27.850	37.191	46.113	241	114.	128.7	2.21	32.9	1070.	2245.	2352.	
122	3484	3423	-0.246	-0.466	34.655	27.851	37.195	46.120	242	113.	128.7	2.21	32.8				
123	3736	3670	-0.265	-0.508	34.655	27.853	37.199	46.126	244	111.	128.0	2.21	32.8				
124	3935	3863	-0.264	-0.526	34.655	27.854	37.202	46.129	245	111.	127.6	2.21	32.6	1058.	2242.	2350	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 103 Latitude 59-56.6 S Longitude 21- 0.0 W Date 2/ 3/84 Bottom Depth 4501 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
230	3	3	1.566	1.566	33.768	27.017	36.258	45.086	346	-7.	31.9	1.39	21.1				
117	3	3	1.562	1.562	33.751	27.003	36.246	45.074	343	-4.	32.1	1.36	21.3	629.	2116.	2292.	
234	31	31	1.565	1.564	33.768	27.017	36.258	45.087	343	-4.	31.7	1.38	21.3				
235	62	62	0.167	0.165	34.111	27.380	36.696	45.594	341	9.	58.6	1.89	26.9				
236	92	91	-0.124	-0.127	34.187	27.456	36.788	45.702	322	31.	67.3	2.02	29.5				
237	121	120	0.014	0.010	34.265	27.512	36.835	45.739	293	59.	73.5	2.09	31.3				
238	151	149	0.608	0.602	34.383	27.574	36.861	45.730	252	94.	77.7	2.21	32.9				
239	180	178	1.029	1.021	34.471	27.619	36.879	45.725	222	120.	81.6	2.26	33.7				
240	219	217	1.401	1.390	34.551	27.658	36.896	45.721	201	137.	86.4	2.27	34.0				
241	260	257	1.509	1.496	34.601	27.690	36.922	45.740	194	143.	88.7	2.26	33.7				
242	299	296	1.507	1.492	34.624	27.709	36.941	45.759	195	142.	93.3	2.23	33.4	1161.	2249.	2342	
243	350	347	1.595	1.577	34.658	27.730	36.956	45.770	190	146.	94.7	2.21	33.0				
244	401	397	1.567	1.546	34.672	27.744	36.971	45.786	191	146.	97.9	2.18	32.5				
245	452	447	1.565	1.541	34.689	27.758	36.985	45.800	193	144.	100.2	2.19	32.4				
246	502	497	1.530	1.504	34.696	27.766	36.996	45.812	197	140.	102.2	2.18	32.2				
247	579	573	1.403	1.373	34.698	27.777	37.014	45.838	197	141.	102.8	2.18	32.1				
248	654	647	1.262	1.228	34.700	27.789	37.034	45.865	200	139.	104.8	2.18	32.1				
102	754	746	0.898	0.861	34.681	27.798	37.064	45.915	206	137.	110.6	2.16	32.2	1087.	2246.	2350	
103	854	844	0.963	0.920	34.701	27.810	37.073	45.921	204	138.	114.2	2.17	32.0				
104	955	944	0.852	0.803	34.700	27.817	37.086	45.940	207	136.	117.0	2.17	32.3				
105	1057	1045	0.752	0.698	34.697	27.821	37.097	45.956	209	135.	119.0	2.19	32.3	1085.	2246.	2351	
106	1157	1143	0.664	0.605	34.697	27.827	37.108	45.972	210	135.	121.1	2.19	32.4				
107	1307	1291	0.444	0.378	34.682	27.829	37.123	46.000	214	133.	123.4	2.22	32.6				
108	1561	1541	0.282	0.202	34.677	27.834	37.139	46.026	218	131.	126.3	2.23	32.9	1105.	2245.	2347	
109	1715	1692	0.208	0.119	34.675	27.838	37.147	46.038	219	130.	127.7	2.26	33.0				
110	1867	1842	0.143	0.044	34.674	27.841	37.154	46.050	222	128.	127.8	2.24	32.9				
111	2020	1992	0.090	-0.019	34.670	27.841	37.158	46.057	224	127.	128.4	2.25	33.0	1101.	2246.	2349	
112	2223	2191	0.017	-0.105	34.668	27.844	37.166	46.070	226	126.	129.5	2.25	33.1				
113	2426	2390	-0.031	-0.167	34.665	27.844	37.171	46.078	230	122.	129.6	2.25	33.1				
114	2628	2588	-0.069	-0.220	34.665	27.847	37.177	46.087	232	121.	130.1	2.24		1087.	2245.	2350	
115	2830	2786	-0.121	-0.287	34.661	27.847	37.181	46.095	235	118.	130.5	2.24					
116	3034	2985	-0.168	-0.350	34.659	27.849	37.186	46.104	241	113.	130.4	2.25		1083.	2240.	2345.	
153	3238	3184	-0.206	-0.405	34.658	27.851	37.191	46.112	241	113.	130.0	2.26	32.8				
118	3441	3382	-0.232	-0.449	34.656	27.851	37.194	46.118	242	113.	129.9	2.25	32.8	1068.	2235.	2341	
119	3644	3580	-0.271	-0.505	34.658	27.855	37.202	46.128	244	111.	129.7	2.24	32.7				
120	3849	3780	-0.275	-0.528	34.655	27.854	37.202	46.130	245	111.	129.1	2.22	32.7	1057.	2234.	2342	
121	4055	3981	-0.267	-0.541	34.653	27.853	37.201	46.130	245	111.	129.4	2.22	32.8				
122	4261	4180	-0.267	-0.561	34.652	27.853	37.203	46.133	245	111.	129.7	2.20	32.7	1051.	2236.	2345	
123	4465	4379	-0.258	-0.574	34.653	27.854	37.205	46.135	246	110.	128.9	2.21	32.7				
124	4578	4488	-0.253	-0.581	34.652	27.854	37.205	46.136	246	110.	129.1	2.21	32.7	1052			

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 104 Latitude 59-45.9 S Longitude 21-40.2 W Date 2/ 3/84 Bottom Depth 3661 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	2	1	1.482	1.482	33.733	26.995	36.241	45.075	348	-8.	31.3	1.38					
117	3	3	1.479	1.479	33.737	26.998	36.245	45.078	348	-8.	31.5	1.37					
236	35	34	1.530	1.528	33.926	27.146	36.387	45.215	346	-7.	32.5	1.48					
237	76	76	0.227	0.224	34.103	27.370	36.683	45.578	338	12.	59.3	1.91					
238	107	106	-0.277	-0.281	34.177	27.456	36.797	45.719	329	25.	73.4	2.03					
239	138	136	-0.729	-0.733	34.232	27.520	36.888	45.834	311	48.	79.3	2.07					
240	157	156	-0.768	-0.773	34.275	27.557	36.926	45.874	301	58.	82.9	2.08					
241	207	205	-0.113	-0.120	34.430	27.652	36.980	45.889	257	95.	91.7	2.17					
242	246	244	0.412	0.402	34.532	27.706	37.001	45.880	230	117.	95.9	2.19					
243	297	294	0.830	0.817	34.602	27.737	37.007	45.862	213	130.	99.1	2.21					
244	348	344	1.006	0.990	34.643	27.759	37.019	45.863	205	137.	101.9	2.20					
245	398	394	1.003	0.984	34.658	27.772	37.031	45.876	205	137.	104.2	2.20					
246	448	444	1.071	1.049	34.673	27.779	37.035	45.876	202	139.	105.8	2.20					
247	523	518	0.888	0.863	34.673	27.792	37.058	45.909	207	136.	109.9	2.19					
248	599	593	0.694	0.666	34.666	27.798	37.076	45.938	210	134.	112.7	2.20					
106	655	648	0.847	0.815	34.692	27.810	37.078	45.932	206	137.	114.7	2.20					
107	750	742	0.598	0.563	34.677	27.813	37.097	45.964	210	135.	118.6	2.21					
108	850	840	0.628	0.587	34.694	27.826	37.108	45.973	209	136.	121.4	2.24					
109	951	940	0.411	0.366	34.676	27.824	37.119	45.997	213	134.	122.2	2.25					
110	1103	1090	0.259	0.207	34.671	27.829	37.134	46.020	215	134.	125.2	2.27					
111	1256	1241	0.218	0.157	34.673	27.834	37.141	46.030	216	133.	127.3	2.29					
112	1409	1391	0.159	0.090	34.672	27.837	37.148	46.041	219	131.	128.3	2.28					
113	1561	1541	0.111	0.033	34.672	27.840	37.154	46.050	221	129.	129.8	2.29					
114	1711	1688	0.062	-0.025	34.670	27.841	37.159	46.058	222	129.	130.2	2.26					
115	1859	1834	0.005	-0.091	34.668	27.843	37.165	46.068	226	125.	130.8	2.29					
116	2007	1979	-0.024	-0.130	34.667	27.844	37.168	46.074	229	123.	130.5	2.27					
153	2206	2174	-0.067	-0.186	34.664	27.845	37.172	46.081	230	122.	130.5	2.26					
118	2402	2366	-0.112	-0.245	34.662	27.846	37.177	46.089	233	120.	130.4	2.27					
119	2603	2563	-0.163	-0.310	34.661	27.848	37.183	46.099	236	117.	130.2	2.26					
120	2831	2786	-0.222	-0.386	34.659	27.850	37.190	46.110	239	115.	130.0	2.23					
121	3061	3011	-0.252	-0.435	34.657	27.851	37.193	46.116	241	114.	130.2	2.24					
122	3287	3232	-0.299	-0.500	34.656	27.853	37.199	46.126	243	112.	130.1	2.23					
123	3511	3451	-0.341	-0.561	34.653	27.854	37.204	46.133	246	110.	129.7	2.23					
124	3707	3641	-0.340	-0.578	34.654	27.855	37.206	46.137	246	110.	129.5	2.23					

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 105 Latitude 59-34.4 S Longitude 22-26.1 W Date 2/ 3/84 Bottom Depth 4238 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	2	2	1.678	1.678	33.804	27.038	36.272	45.094	344	-6.	30.6	1.38					
230	2	2	1.621	1.621	33.853	27.081	36.318	45.142	343	-5.	35.2	1.41		635.	2123.	2299	
233	24	23	1.653	1.652	33.857	27.082	36.317	45.139	344	-6.	33.9	1.44					
234	60	59	0.750	0.748	33.998	27.256	36.540	45.408	346	-1.	48.6	1.73					
235	100	99	-0.019	-0.022	34.154	27.424	36.751	45.659	329	23.	66.4	2.02		881.	2187.	2316.	
236	139	138	0.391	0.386	34.324	27.540	36.839	45.722	267	81.	76.2	2.20					
237	178	176	1.276	1.268	34.476	27.606	36.853	45.685	211	129.	81.8	2.32					
238	217	215	1.537	1.526	34.555	27.651	36.882	45.700	196	141.	86.7	2.31					
239	257	255	1.476	1.463	34.579	27.675	36.909	45.729	195	143.	90.0	2.26					
240	297	294	1.534	1.519	34.610	27.696	36.926	45.743	193	144.	92.0	2.25		1178.	2249.	2340	
241	348	345	1.591	1.573	34.649	27.723	36.950	45.763	190	146.	94.4	2.22					
242	399	395	1.592	1.571	34.675	27.744	36.970	45.784	191	145.	96.1	2.19					
243	450	445	1.588	1.564	34.680	27.749	36.975	45.789	190	146.	97.4	2.19					
244	500	495	1.547	1.521	34.685	27.756	36.985	45.801	194	143.	98.3	2.16					
245	551	545	1.505	1.476	34.689	27.762	36.994	45.812	193	144.	99.3	2.16					
246	601	594	1.338	1.307	34.680	27.767	37.008	45.835	198	141.	101.6	2.16		1117.	2247.	2347	
247	652	645	1.330	1.296	34.693	27.779	37.020	45.847	197	142.	103.4	2.19					
248	703	695	1.319	1.282	34.701	27.786	37.028	45.856	198	141.	104.6	2.17					
102	781	773	1.263	1.222	34.709	27.797	37.042	45.873	199	140.	108.2	2.14					
103	857	847	1.196	1.151	34.709	27.801	37.051	45.886	200	140.	110.3	2.14					
104	957	946	1.073	1.023	34.705	27.807	37.063	45.906	202	139.	113.5	2.16					
105	1059	1046	0.945	0.890	34.703	27.814	37.078	45.927	205	137.	117.2	2.16		1080.	2256.	2362	
106	1208	1194	0.756	0.693	34.693	27.818	37.094	45.954	208	136.	118.2	2.16					
107	1352	1336	0.607	0.536	34.687	27.823	37.108	45.977	211	135.	120.2	2.18					
108	1504	1485	0.509	0.430	34.685	27.828	37.119	45.993	214	133.	121.7	2.17		1085.	2249.	2354	
109	1655	1633	0.379	0.291	34.679	27.831	37.130	46.012	216	132.	123.0	2.19					
110	1805	1781	0.250	0.154	34.673	27.834	37.141	46.031	218	131.	125.2	2.21					
111	1955	1928	0.205	0.099	34.672	27.836	37.147	46.039	220	130.	126.6	2.20		1095	2255.	2359	
112	2106	2076	0.152	0.036	34.671	27.839	37.153	46.049	223	127.	127.5	2.20					
113	2307	2274	0.077	-0.052	34.668	27.841	37.161	46.062	225	126.	128.6	2.20					
114	2509	2472	0.017	-0.127	34.665	27.842	37.166	46.072	228	124.	127.7	2.22		1097.	2252.	2356	
115	2713	2671	-0.046	-0.205	34.663	27.845	37.173	46.083	231	121.	128.8	2.22					
116	2914	2867	-0.090	-0.264	34.662	27.847	37.179	46.092	234	119.	129.4	2.23					
153	3117	3066	-0.131	-0.321	34.659	27.847	37.183	46.099	238	116.	130.1	2.24		1089.	2250.	2355	
118	3321	3265	-0.185	-0.392	34.658	27.850	37.190	46.110	239	115.	129.8	2.24					
119	3523	3462	-0.230	-0.454	34.656	27.851	37.195	46.119	242	113.	129.8	2.22		1075.	2249.	2356.	
120	3726	3660	-0.263	-0.505	34.655	27.853	37.199	46.126	244	111.	129.8	2.21					
121	3928	3856	-0.255	-0.517	34.654	27.852	37.200	46.127	244	111.	128.8	2.21		1064.	2244.	2352	
122	4134	4057	-0.293	-0.574	34.652	27.853	37.204	46.135	246	110.	128.8	2.21					
123	4288	4207	-0.315	-0.611	34.651	27.854	37.207	46.140	248	108.	128.6	2.21					
124	4290	4208	-0.315	-0.611	34.652	27.855	37.208	46.141	248	108.	128.2	2.21		1052.	2247.	2357	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 106 Latitude 59-27.2 S Longitude 23-19.6 W Date 2/ 4/84 Bottom Depth 5061 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	2	2	2.718	2.718	34.005	27.116	36.290	45.055	338	-10.	24.4	1.35	21.0				
230	4	4	2.712	2.712	34.004	27.115	36.290	45.055	358	-30.	24.5	1.30					
232	27	27	2.714	2.712	34.004	27.115	36.290	45.055	338	-10.	24.2	1.31					
233	59	58	1.886	1.883	34.026	27.200	36.420	45.227	340	-5.	36.3	1.58					
234	91	90	0.735	0.731	34.072	27.316	36.600	45.468	337	8.	51.0	1.90					
235	121	120	0.146	0.142	34.145	27.409	36.725	45.625	325	26.	60.5	2.00					
236	151	150	0.368	0.362	34.229	27.464	36.767	45.652	291	57.		2.12					
237	180	178	0.937	0.929	34.346	27.524	36.792	45.645	243	100.	71.9	2.23					
238	219	217	1.474	1.463	34.473	27.590	36.825	45.648	204	134.	79.5	2.30					
239	259	256	1.573	1.560	34.526	27.625	36.855	45.671	196	141.	83.5	2.28					
240	299	296	1.495	1.480	34.550	27.651	36.884	45.704	196	142.	86.3	2.28					
241	349	345	1.656	1.638	34.603	27.681	36.905	45.716	189	147.	89.5	2.28					
242	399	395	1.737	1.716	34.641	27.706	36.925	45.731	186	149.	91.5	2.25					
243	450	445	1.714	1.690	34.659	27.722	36.942	45.750	189	146.	93.5	2.23					
244	501	495	1.673	1.646	34.671	27.735	36.958	45.767	189	147.	95.5	2.21					
245	577	571	1.538	1.507	34.679	27.752	36.982	45.799	192	145.	97.6	2.20					
246	629	622	1.636	1.602	34.702	27.764	36.988	45.799	194	142.	98.0	2.15					
247	702	694	1.583	1.545	34.712	27.776	37.003	45.817	195	142.	98.8	2.12					
248	803	794	1.401	1.358	34.709	27.787	37.025	45.849	198	140.	103.4	2.11					
102	907	896	1.465	1.415	34.731	27.801	37.034	45.855	202	136.	102.4	2.09	31.5				
103	1008	996	1.263	1.208	34.718	27.805	37.051	45.883	201	138.	108.5	2.14	32.2				
104	1108	1095	1.034	0.975	34.703	27.808	37.068	45.912	203	139.	114.0	2.18	32.5				
105	1210	1195	0.927	0.862	34.700	27.813	37.079	45.930	205	138.	116.6	2.17	32.3				
106	1361	1345	0.818	0.745	34.702	27.822	37.095	45.952	207	137.	119.5	2.17	32.3				
107	1513	1494	0.668	0.586	34.693	27.825	37.107	45.973	210	135.	122.4	2.18	32.5				
108	1665	1643	0.530	0.440	34.685	27.827	37.118	45.992	213	133.	123.7	2.19	32.5				
109	1817	1792	0.438	0.339	34.684	27.832	37.129	46.008	216	131.	125.1	2.21	32.6				
110	1968	1941	0.325	0.216	34.678	27.835	37.138	46.024	219	130.	126.6	2.20	32.7				
111	2120	2090	0.240	0.122	34.676	27.838	37.147	46.039	220	129.	127.9	2.21	33.0				
112	2323	2289	0.168	0.036	34.670	27.838	37.152	46.048	225	125.	128.5	2.19	33.0				
113	2526	2488	0.072	-0.074	34.667	27.841	37.162	46.064	225	126.	129.5	2.19	33.2				
114	2729	2687	0.022	-0.139	34.666	27.844	37.168	46.074	229	123.	129.9	2.19	33.1				
115	2932	2885	-0.028	-0.205	34.668	27.849	37.177	46.087	231	121.	130.2	2.20	33.2				
116	3136	3084	-0.076	-0.269	34.660	27.846	37.178	46.091	235	118.	131.2	2.20	33.1				
153	3390	3333	-0.148	-0.362	34.659	27.849	37.187	46.106			131.2	2.20	33.1				
118	3646	3582	-0.223	-0.459	34.654	27.850	37.193	46.118	240	115.	130.1	2.19	32.9				
119	3901	3831	-0.279	-0.537	34.654	27.854	37.202	46.130	245	111.	129.3	2.19	32.7				
120	4157	4079	-0.314	-0.596	34.652	27.854	37.206	46.138	247	109.	126.5	2.20	32.8				
121	4413	4328	-0.352	-0.659	34.648	27.854	37.210	46.145	250	107.	126.2	2.18	32.8				
122	4669	4576	-0.381	-0.714	34.647	27.856	37.215	46.153									
123	4926	4826	-0.376	-0.738	34.647	27.857	37.217	46.157	253	105.	122.8	2.21	32.8				
124	5151	5044	-0.372	-0.759	34.647	27.857	37.219	46.160	254	104.	123.7	2.19	32.8				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 107 Latitude 59-15.8 S Longitude 23-58.9 W Date 2/ 4/84 Bottom Depth 7691 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
325	2	1	1.594	1.594	33.953	27.163	36.400	45.224	361	-23.	41.7	1.09	18.0				
217	4	4	1.613	1.613	33.954	27.163	36.398	45.221	361	-23.	40.5	1.10	17.3	547.	2107.	2310.	2106
330	16	16	1.596	1.595	33.952	27.162	36.399	45.223	361	-23.		1.10					
331	53	52	1.241	1.239	34.052	27.267	36.523	45.364	356	-15.	44.4	1.32	20.6	617.	2135.	2319	
332	85	84	-0.334	-0.337	34.175	27.457	36.802	45.727	329	26.	54.5	2.04	27.9				
333	115	114	-0.798	-0.801	34.271	27.555	36.926	45.876	309	50.	65.7	2.15	30.5				
334	144	143	-0.190	-0.195	34.380	27.615	36.948	45.862	274	79.	67.9	2.22	32.4				
335	175	173	-0.355	-0.361	34.435	27.668	37.010	45.932	264	91.	93.8	2.20	32.7	1048.	2226.	2333	
336	215	213	0.103	0.095	34.505	27.702	37.015	45.911	245	105.	96.2	2.22	33.1				
337	255	252	-0.420	-0.429	34.497	27.721	37.066	45.991	258	97.	102.4	2.17	32.8				
338	295	292	-0.184	-0.195	34.543	27.747	37.077	45.988	243	110.	105.8	2.20	33.5				
339	345	341	0.026	0.013	34.582	27.768	37.085	45.984	234	117.	108.5	2.17	33.2	1079.	2242.	2347	
340	395	391	0.058	0.043	34.604	27.784	37.099	45.996	229	121.	111.9	2.20	33.4				
341	444	440	0.062	0.044	34.624	27.800	37.115	46.011	227	123.	115.4	2.20	33.6				
342	518	513	0.265	0.243	34.653	27.813	37.115	46.000	219	129.	118.4	2.21	33.8				
343	593	586	0.313	0.287	34.668	27.823	37.122	46.004	216	132.	121.8	2.21	33.8	1100.	2253.	2356	
344	666	659	0.305	0.276	34.670	27.825	37.125	46.008	216	132.	122.6	2.24	33.7				
345	742	734	0.050	0.019	34.653	27.825	37.141	46.038	217	133.	122.5	2.26	34.5				
346	816	806	0.099	0.064	34.662	27.830	37.143	46.037	213	137.	125.6	2.26	34.6				
347	942	931	0.103	0.061	34.665	27.833	37.145	46.040	211	139.	128.6	2.26	34.8				
348	1069	1056	0.059	0.011	34.666	27.836	37.152	46.049	216	134.	129.0	2.26	34.6	1144.	2257.	2355.	2253
202	1087	1074	0.062	0.013	34.667	27.837	37.152	46.050									
203	1212	1197	0.035	-0.021	34.667	27.839	37.156	46.056	222	129.	129.5	2.24	33.2				
204	1364	1347	0.005	-0.060	34.666	27.840	37.160	46.061	225	126.	129.9	2.23	33.1				
205	1515	1495	-0.030	-0.103	34.666	27.842	37.165	46.068	227	125.	130.1	2.23	33.2				
206	1666	1644	-0.064	-0.146	34.665	27.843	37.168	46.075	229	123.	130.3	2.22	33.1	1100.	2252.	2355	
207	1817	1792	-0.104	-0.196	34.663	27.844	37.172	46.082	232	120.	130.7	2.23	33.2				
208	1968	1941	-0.133	-0.234	34.662	27.845	37.176	46.087	233	120.	130.1	2.19	33.1				
209	2170	2139	-0.172	-0.287	34.660	27.846	37.180	46.094	237	116.	129.7	2.22	33.3	1092.	2247.	2351.	2247
210	2371	2336	-0.197	-0.326	34.658	27.847	37.182	46.099	239	115.	129.7	2.23	33.3				
211	2571	2532	-0.228	-0.372	34.657	27.848	37.187	46.106	241	113.	129.1	2.21	33.2				
212	2774	2731	-0.255	-0.414	34.656	27.849	37.190	46.112	244	110.	128.5	2.21	33.3	1074.	2246.	2353	
213	3028	2979	-0.286	-0.465	34.654	27.850	37.194	46.119	243	112.	127.9	2.21	33.2				
214	3281	3226	-0.325	-0.525	34.652	27.851	37.199	46.127	247	109.	126.1	2.20	33.0				
215	3534	3473	-0.339	-0.561	34.652	27.853	37.203	46.133	247	109.	127.9	2.19	33.0				
216	3789	3721	-0.356	-0.601	34.651	27.854	37.206	46.138	249	107.	126.3	2.19	32.9	1051.	2239.	2348	
253	4043	3969	-0.383	-0.652	34.650	27.855	37.211	46.146	251	106.	124.0	2.19	32.9				
218	4297	4215	-0.393	-0.687	34.648	27.855	37.213	46.150	252	105.	123.3	2.19	32.7				
219	4552	4464	-0.387	-0.708	34.647	27.855	37.214	46.152	252	105.	123.1	2.20	32.9				
220	4809	4713	-0.382	-0.730	34.647	27.856	37.216	46.156	253	105.	123.3	2.16	32.9	1038.	2236.	2347	
221	5067	4962	-0.370	-0.747	34.647	27.857	37.218	46.159	254	104.	122.7	2.16	33.0				
222	5324	5211	-0.356	-0.763	34.644	27.855	37.217	46.159	255	103.	122.0	2.17	33.1				
223	5583	5462	-0.332	-0.770	34.643	27.855	37.217	46.159	256	102.	122.5	2.17	32.9				
224	5839	5709	-0.307	-0.777	34.644	27.856	37.219	46.161	255	103.	121.2	2.16	32.9	1038.	2236.	2347.	2237
141	7289	7103	-0.146	-0.814	34.642	27.856	37.221	46.166	257	101.	120.8	2.15	33.2				
145	7655	7454	-0.100	-0.822	34.642	27.856	37.222	46.167	258	100.	121.0	2.15	33.0	1025.	2238.	2351.	2235

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 108 Latitude 59- 6.3 S Longitude 24-29.2 W Date 2/ 5/84 Bottom Depth 4323 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	3	2	0.928	0.928	33.639	26.956	36.235	45.100	375	-30.	60.1	1.03	16.5				
117	4	4	0.972	0.972	33.643	26.956	36.233	45.095	373	-29.	62.4	1.03	16.5	510.	2089.	2303	
232	23	23	0.861	0.860	33.646	26.965	36.249	45.117	373	-28.	61.0	1.11	17.2				
233	66	65	-1.606	-1.607	34.306	27.611	37.031	46.027	312	55.	97.3	2.05	30.2				
234	95	94	-1.290	-1.292	34.431	27.703	37.101	46.076	288	76.	101.7	2.09	31.7				
235	120	119	-0.962	-0.965	34.493	27.741	37.118	46.074	269	91.	104.5	2.12	32.3	981.	2240.	2359	
236	149	147	-0.530	-0.535	34.560	27.777	37.127	46.057	238	118.	108.9	2.16	32.8				
237	178	176	0.140	0.133	34.617	27.790	37.099	45.991	227	122.	111.7	2.17	33.0				
238	223	220	0.536	0.527	34.674	27.813	37.099	45.968	212	134.	115.5	2.18	33.1				
239	268	265	0.488	0.477	34.672	27.815	37.103	45.975	218	128.	117.7	2.19	33.1				
240	314	311	0.405	0.392	34.673	27.820	37.114	45.990	213	134.	119.1	2.19	33.2				
245	364	361	0.317	0.302	34.673	27.826	37.124	46.006	217	131.	120.2	2.19	33.3	1099.	2261	2365	
246	425	421	0.307	0.289	34.673	27.826	37.126	46.008	217	131.	121.5	2.21	33.4				
247	501	496	0.228	0.207	34.672	27.830	37.134	46.021	217	132.	122.5	2.20	33.4				
248	602	596	0.186	0.161	34.673	27.834	37.140	46.030	218	131.	124.4	2.20	33.6				
102	703	695	0.110	0.080	34.670	27.835	37.147	46.041	217	133.	128.7	2.22	33.7	1119.	2255.	2356	
103	803	794	0.053	0.019	34.670	27.839	37.154	46.051	219	131.	129.6	2.26	33.8				
104	904	894	0.003	-0.036	34.669	27.841	37.159	46.060	220	131.	130.2	2.26	34.0				
105	1005	993	-0.019	-0.063	34.668	27.842	37.162	46.063	223	128.	129.9	2.25	33.9	1116.	2251.	2352	
106	1156	1143	-0.064	-0.116	34.666	27.843	37.166	46.071	228	124.	130.1	2.24	33.7				
107	1304	1288	-0.112	-0.172	34.665	27.845	37.171	46.079	229	123.	129.9	2.24	33.6				
108	1455	1436	-0.163	-0.231	34.663	27.846	37.176	46.087	232	121.	130.4	2.24	33.6	1084.	2254.	2360	
109	1606	1585	-0.188	-0.265	34.660	27.845	37.177	46.091	234	119.	130.3	2.24	33.6				
110	1757	1734	-0.224	-0.310	34.659	27.847	37.182	46.097	237	116.	130.2	2.24	33.6				
111	1909	1883	-0.255	-0.351	34.659	27.849	37.186	46.104	240	114.	128.7	2.25	33.5	1087.	2256.	2362	
112	2111	2082	-0.294	-0.403	34.657	27.850	37.190	46.111	242	112.	128.8	2.24	33.4				
113	2314	2280	-0.325	-0.448	34.656	27.851	37.194	46.117	243	112.	128.8	2.22	33.3	1067.	2255.	2363	
114	2517	2479	-0.363	-0.500	34.654	27.852	37.198	46.124	244	111.	128.2	2.23	33.1				
115	2719	2677	-0.397	-0.549	34.653	27.853	37.202	46.131	245	111.	127.5	2.22	33.0				
116	2920	2874	-0.417	-0.584	34.650	27.852	37.204	46.135									
153	3124	3073	-0.440	-0.624	34.651	27.855	37.208	46.142	249	107.	125.8	2.24	32.9				
118	3328	3272	-0.463	-0.664	34.649	27.855	37.211	46.147	250	107.	124.4	2.23	32.8	1041.	2253.	2365	
119	3528	3467	-0.482	-0.700	34.647	27.855	37.213	46.151	253	104.	122.8	2.21	32.7				
120	3731	3665	-0.489	-0.725	34.647	27.856	37.216	46.155	254	103.	122.9	2.20	32.7	1044.	2243.	2354	
121	3934	3863	-0.500	-0.755	34.645	27.856	37.218	46.158	255	103.	120.4	2.19	32.6				
122	4140	4063	-0.498	-0.773	34.643	27.855	37.218	46.160	255	103.	119.8	2.22	32.5	1034.	2238.	2350	
124	4355	4271	-0.483	-0.780	34.643	27.855	37.218	46.161	255	103.	120.3	2.21	32.5	1030.	2234.	2346	
123	4356	4273	-0.483	-0.780	34.643	27.855	37.218	46.161	255	103.	119.9	2.22	32.5				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 109 Latitude 58-55.3 S Longitude 25- 7.4 W Date 2/ 5/84 Bottom Depth 2532 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
102	3	3	1.301	1.301	33.795	27.057	36.313	45.155	366	-25.	49.6	1.10	16.3				
117	3	3	1.300	1.300	33.792	27.054	36.311	45.153	365	-24.	50.6	1.08	16.1		2091		
103	30	30	1.007	1.006	33.822	27.098	36.370	45.227	355	-11.	51.2	1.24	17.5				
104	59	58	-1.357	-1.358	34.174	27.496	36.903	45.887	324	41.	92.8	2.04	29.0				
105	89	88	-1.431	-1.433	34.342	27.635	37.044	46.029	306	59.	98.8	2.09	31.9				
106	119	117	-1.235	-1.238	34.416	27.689	37.084	46.056	290	73.	103.0	2.12	32.5				
107	159	157	-0.693	-0.698	34.497	27.733	37.094	46.035	264	94.	107.8	2.15	33.2				
108	199	197	-0.161	-0.168	34.580	27.776	37.104	46.013	238	114.	112.3	2.16	33.6				
109	249	247	0.150	0.140	34.632	27.802	37.110	46.002	222	127.	117.5	2.20	33.9				
110	300	297	0.238	0.226	34.654	27.815	37.118	46.004	219	129.	120.4	2.20	33.9				
111	375	371	0.219	0.204	34.663	27.823	37.127	46.015	216	133.	123.9	2.20	34.0				
112	476	471	0.178	0.158	34.669	27.830	37.137	46.027	217	132.	125.7	2.21	34.3				
113	576	570	0.112	0.088	34.669	27.834	37.145	46.039	217	133.	127.2	2.21	34.4				
114	702	695	0.082	0.052	34.667	27.835	37.148	46.043	219	131.	128.1	2.25	34.3				
115	829	819	0.018	-0.018	34.667	27.839	37.156	46.055	220	131.	129.2	2.23	34.5				
116	955	944	-0.024	-0.066	34.667	27.841	37.161	46.063	224	127.	130.3	2.25	34.5				
153	1081	1069	-0.058	-0.106	34.666	27.842	37.165	46.069	226	126.	130.4	2.25	34.4				
118	1233	1218	-0.095	-0.151	34.663	27.842	37.167	46.074	229	123.	130.9	2.24	34.2				
119	1385	1367	-0.131	-0.195	34.664	27.845	37.173	46.082	232	120.	130.8	2.25	34.1				
120	1586	1566	-0.182	-0.258	34.660	27.845	37.177	46.089	235	118.	130.6	2.25	34.0				
121	1789	1765	-0.215	-0.303	34.659	27.846	37.181	46.096	239	114.	130.5	2.24	34.0				
122	1991	1964	-0.258	-0.359	34.656	27.847	37.184	46.103	241	113.	129.5	2.22	33.9				
123	2395	2360	-0 325	-0.453	34 655	27.850	37 194	46 117	245	110	127 7	2 21	33 7				
124	2551	2513	-0.342	-0.482	34.653	27.850	37.195	46.121	244	111.	127.1	2.21	33.6				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 110 Latitude 58-47.8 S Longitude 25-50.2 W Date 2/ 5/84 Bottom Depth 1916 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
									- - -	- - -	uM/KG -	- - -	- - -				
225	2	2	1.401	1.401	33.671	26.950	36.203	45.041	377	-37.	60.4	0.99	16.4	498.	2081.	2299	
226	23	23	0.618	0.617	33.679	27.006	36.303	45.184	365	-18.	65.4	1.23	18.2	558.	2098.	2296	
227	50	50	-1.372	-1.373	34.095	27.433	36.842	45.828	329	36.	88.7	2.00	27.8				
228	76	75	-1.455	-1.457	34.325	27.622	37.032	46.019	309	57.	95.2	2.05	31.1				
229	100	99	-1.224	-1.227	34.398	27.674	37.068	46.041	290	73.	97.5	2.08	31.9				
230	125	123	-0.883	-0.887	34.465	27.715	37.088	46.040	271	89.	100.0	2.10	32.3				
231	174	172	-0.306	-0.312	34.536	27.748	37.084	46.002	246	108.	105.9	2.13	32.7				
232	224	222	0.218	0.209	34.628	27.795	37.099	45.987	223	126.	111.0	2.18	32.9				
233	274	271	0.341	0.330	34.648	27.804	37.101	45.982	219	129.	114.3	2.19	33.0				
234	323	320	0.338	0.325	34.658	27.812	37.110	45.990	216	132.	117.3	2.20	33.0				
235	399	395	0.318	0.301	34.665	27.819	37.118	46.000	217	131.	120.1	2.22	33.2				
236	474	469	0.198	0.178	34.664	27.825	37.131	46.020	217	132.	121.9	2.23	33.4				
237	549	543	0.175	0.152	34.666	27.828	37.136	46.026	218	131.	123.6	2.23	33.4				
238	624	617	0.146	0.120	34.667	27.831	37.140	46.032	218	131.	124.5	2.23	33.5				
239	699	691	0.111	0.081	34.667	27.833	37.145	46.038	218	132.	125.9	2.24	33.5				
240	799	790	0.073	0.039	34.667	27.835	37.150	46.046	219	131.	126.7	2.24	33.5				
241	897	887	0.039	0.000	34.666	27.837	37.153	46.051	219	132.	128.4	2.26	33.8				
242	1046	1034	0.000	-0.047	34.666	27.839	37.158	46.059	222	129.	128.4	2.25	33.7				
243	1195	1181	-0.059	-0.113	34.664	27.841	37.164	46.069	226	126.	128.4	2.25	33.6				
244	1342	1326	-0.091	-0.153	34.664	27.843	37.169	46.075	229	123.	129.0	2.26	33.5				
245	1494	1475	-0.137	-0.208	34.663	27.845	37.174	46.083	231	121.	129.4	2.24	33.5				
246	1639	1618	-0.165	-0.244	34.662	27.846	37.177	46.089	234	119.	129.4	2.24	33.5				
247	1791	1767	-0.191	-0.280	34.663	27.848	37.181	46.095	234	119.	130.2	2.24	33.3				
248	1931	1905	-0.228	-0.325	34.659	27.847	37.183	46.100	237	117.	131.9	2.25	33.3				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 111 Latitude 58-40.9 S Longitude 26-50.6 W Date 2/ 5/84 Bottom Depth 2293 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - - -		uM/KG -	- - - - - -		uatm	uM/kg	uEq/kg	uM/kg
117	3	3	1.801	1.801	33.688	26.936	36.165	44.982	386	-49.	56.9	0.82	13.8				
102	24	24	1.187	1.186	33.706	26.993	36.257	45.106	385	-43.	57.5	0.90	14.5				
103	54	53	0.203	0.201	33.899	27.207	36.525	45.424	354	-3.							
104	83	82	-1.098	-1.100	34.142	27.462	36.853	45.822	325	37.	88.3	2.02	27.2				
105	122	121	-1.357	-1.360	34.281	27.583	36.988	45.970	311	54.	94.3	2.08	30.3				
106	163	161	-0.767	-0.772	34.427	27.680	37.046	45.992	276	83.	98.3	2.15	32.2				
107	202	200	-0.149	-0.156	34.528	27.733	37.061	45.970	246	106.	103.4	2.18	32.7				
108	251	248	0.303	0.293	34.609	27.775	37.075	45.958	223	125.	108.6	2.19	32.9				
109	300	297	0.413	0.401	34.638	27.792	37.085	45.962									
110	348	345	0.443	0.428	34.648	27.798	37.090	45.965	197	150.	113.2	2.20	33.1				
111	422	418	0.426	0.408	34.659	27.808	37.101	45.977	217	130.	116.6	2.20	33.0				
112	496	491	0.403	0.382	34.669	27.818	37.112	45.989	213	134.	118.9	2.21	33.0				
113	596	590	0.346	0.320	34.669	27.821	37.119	46.000	215	133.	121.1	2.22	33.2				
114	696	688	0.244	0.214	34.670	27.828	37.132	46.018	216	133.	122.8	2.23	33.3				
115	795	786	0.176	0.141	34.667	27.830	37.138	46.028	219	130.	124.5	2.23	33.4				
116	945	935	0.117	0.075	34.667	27.833	37.145	46.040	219	131.	126.0	2.24	33.5				
153	1097	1084	0.065	0.015	34.668	27.838	37.153	46.050	220	130.	127.1	2.25	33.5				
118	1249	1234	0.000	-0.058	34.667	27.841	37.160	46.062	222	129.	128.4	2.25	33.6				
119	1398	1381	-0.038	-0.104	34.665	27.841	37.164	46.068	226	126.	129.1	2.26	33.4				
120	1548	1528	-0.075	-0.150	34.663	27.842	37.167	46.074	228	124.	129.3	2.26	33.4				
121	1697	1675	-0.117	-0.201	34.662	27.844	37.172	46.082	230	122.	129.9	2.26	33.4				
122	1899	1873	-0.157	-0.253	34.660	27.845	37.176	46.089	233	120.	130.0	2.25	33.4				
123	2103	2074	-0.182	-0.292	34.659	27.846	37.180	46.094	235	118.	130.2	2.24	33.2				
124	2304	2270	-0.201	-0.325	34.659	27.847	37.183	46.100	236	118.	130.6	2.24	33.1				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 112 Latitude 58-24.8 S Longitude 27-36.8 W Date 2/ 6/84 Bottom Depth 3190 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	3	3	2.075	2.075	33.858	27.051	36.263	45.063	337	-3.	35.9	1.17	22.0	630.	2120.	2297.	
102	31	31	1.290	1.289	33.860	27.110	36.365	45.207	351	-10.	42.8	1.26	22.4				
103	60	59	-0.838	-0.840	34.060	27.385	36.762	45.718	347	13.	74.3	1.96	27.9				
104	94	93	-1.411	-1.413	34.151	27.479	36.890	45.877	335	31.	82.2	2.10	30.2				
105	129	128	-1.220	-1.223	34.241	27.546	36.943	45.918	316	47.	86.4	2.15	31.8	996.	2204.	2316	
106	175	173	-0.230	-0.236	34.418	27.648	36.983	45.898	268	85.	91.0	2.19	33.2				
107	220	218	0.371	0.362	34.519	27.698	36.996	45.876	238	110.	93.6	2.21	33.6				
108	261	258	0.678	0.667	34.588	27.735	37.014	45.877	222	123.	97.8	2.20	33.5				
109	326	323	0.740	0.726	34.626	27.762	37.037	45.897	217	127.	102.0	2.18	33.2	1104.	2241	2342	
110	401	397	0.780	0.762	34.646	27.776	37.049	45.906	212	132.	104.8	2.18	33.1				
111	501	496	0.756	0.733	34.666	27.794	37.068	45.926	211	133.	109.0	2.18	33.0				
112	625	619	0.637	0.608	34.671	27.806	37.087	45.952	213	132.	113.6	2.18	32.8	1096.	2246.	2349	
113	750	742	0.545	0.510	34.675	27.815	37.102	45.972	213	133.	117.4	2.20	33.2				
114	898	888	0.438	0.396	34.674	27.821	37.114	45.991	216	131.	119.6	2.20	33.2	1091.	2248.	2352	
115	1099	1086	0.301	0.249	34.672	27.828	37.130	46.014	217	131.	122.1	2.21	33.3				
116	1300	1284	0.227	0.164	34.671	27.832	37.139	46.028	219	130.	124.0	2.21	33.4	1106.	2252.	2354	
153	1553	1533	0.131	0.053	34.670	27.837	37.150	46.045	226	124.	126.3	2.22	33.6				
118	1806	1782	0.030	-0.063	34.665	27.839	37.159	46.061	227	124.	126.7	2.24	33.5	1094.	2249.	2353	
119	2063	2034	-0.045	-0.154	34.663	27.842	37.168	46.075	233	119.	127.1	2.24	33.5				
120	2317	2284	-0.106	-0.233	34.660	27.844	37.174	46.085	234	119.	127.5	2.24	33.4	1094.	2248	2352	
121	2574	2535	-0.142	-0.288	34.659	27.846	37.179	46.093	238	115.	128.1	2.22	33.3				
122	2828	2784	-0 159	-0.324	34.657	27.846	37 182	46.098	240	114.	127 9	2 25	33 4	1079			
123	3083	3033	-0.169	-0.355	34.656	27.847	37.184	46.102	238	116.	129.7	2.25	33.2				
124	3226	3173	-0.184	-0.383	34.657	27.849	37.188	46.107	238	116.	131.8	2.24	33.3	1083.	2243.	2348	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 113 Latitude 58- 1.8 S Longitude 29-17.5 W Date 2/ 6/84 Bottom Depth 3404 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	ADU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	2	2	1.792	1.792	33.987	27.176	36.401	45.214	347	-11.	48.9	1.23	22.1	648.	2135.	2310	
117	3	3	1.821	1.821	33.999	27.183	36.407	45.218	347	-11.	47.1	1.24	22.4				
238	16	16	1.782	1.781	33.992	27.181	36.407	45.220	348	-12.	48.8	1.23	22.2	642.	2134.	2310	
239	37	37	1.206	1.204	34.036	27.257	36.514	45.357	350	-9.	52.8	1.36	23.2				
240	68	67	-0.002	-0.004	34.107	27.385	36.712	45.619	344	8.	67.2	1.73	25.6				
241	98	97	-0.727	-0.730	34.231	27.520	36.887	45.833	311	48.	81.8	2.13	29.7				
242	137	136	-0.173	-0.178	34.369	27.606	36.938	45.851	268	85.	86.6	2.25	32.6				
243	176	175	0.347	0.340	34.478	27.666	36.966	45.849	240	108.	91.5	2.26	33.4				
244	217	215	0.700	0.691	34.544	27.699	36.977	45.839	224	121.	93.4	2.25	33.5				
245	258	256	0.856	0.844	34.587	27.724	36.992	45.846	216	127.	95.8	2.26	33.4				
246	298	295	0.985	0.971	34.621	27.743	37.004	45.850	209	133.	97.8	2.23	33.2				
247	348	345	1.026	1.010	34.645	27.760	37.018	45.861	208	133.	99.8	2.21	33.0				
248	398	394	0.986	0.967	34.658	27.773	37.033	45.879	208	134.	102.5	2.23	32.9				
102	452	447	0.994	0.972	34.672	27.784	37.044	45.889	206	136.	105.0	2.17	32.8				
103	502	497	0.960	0.936	34.677	27.790	37.052	45.899	206	136.	107.6	2.18	32.8				
104	553	547	1.019	0.992	34.697	27.802	37.061	45.905	204	137.	109.5	2.17	32.7				
105	604	598	0.920	0.891	34.692	27.805	37.069	45.919	206	136.	111.1	2.18	32.7				
106	654	647	0.743	0.712	34.679	27.806	37.081	45.940	211	133.	112.6	2.19	32.9				
107	702	695	0.704	0.671	34.683	27.812	37.089	45.950	211	133.	113.9	2.19	32.9				
108	803	794	0.646	0.608	34.683	27.816	37.096	45.961	212	133.	116.5	2.21	32.8				
109	903	893	0.542	0.499	34.681	27.821	37.108	45.978	213	133.	118.8	2.21	32.9				
110	1005	993	0.469	0.421	34.680	27.824	37.116	45.991	215	132.	120.6	2.21	33.0				
111	1105	1092	0.425	0.371	34.680	27.827	37.122	45.999	216	131.	122.1	2.21	32.9				
112	1258	1243	0.302	0.240	34.674	27.830	37.132	46.017	218	130.	123.4	2.23	33.1				
113	1408	1391	0.217	0.147	34.674	27.835	37.143	46.033	220	129.	124.4	2.24	33.2				
114	1560	1540	0.148	0.070	34.670	27.836	37.148	46.043	220	130.	125.6	2.25	33.4				
115	1711	1689	0.091	0.004	34.670	27.840	37.156	46.054	222	129.	127.1	2.25	33.5				
116	1864	1839	0.036	-0.061	34.670	27.843	37.163	46.064	226	125.	127.4	2.25	33.4				
153	2017	1989	-0.009	-0.116	34.665	27.842	37.165	46.070	229	123.	127.2	2.25	33.3				
118	2221	2189	-0.052	-0.173	34.663	27.843	37.170	46.078	230	122.	128.2	2.24	33.3				
119	2423	2387	-0.110	-0.245	34.662	27.846	37.177	46.089	234	119.	128.9	2.24	33.2				
120	2627	2587	-0.149	-0.299	34.658	27.845	37.180	46.094	236	117.	129.2	2.25	33.1				
121	2830	2785	-0.180	-0.345	34.657	27.847	37.184	46.101	238	116.	129.8	2.24	33.4				
122	3034	2986	-0.187	-0.369	34.657	27.848	37.186	46.105	238	116.	130.5	2.24	33.1				
123	3238	3184	-0.188	-0.387	34.655	27.847	37.187	46.107	239	115.	129.7	2.23	33.0				
124	3443	3384	-0.180	-0.398	34.655	27.848	37.188	46.108	241	113.	129.8	2.24	33.0				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 114 Latitude 57-39.1 S Longitude 31- 2.8 W Date 2/ 7/84 Bottom Depth 2655 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
117	3	3	1.985	1.985	34.052	27.213	36.427	45.229	340	-6.	33.0	1.26	21.3	639.	2136.	2313	
102	46	45	1.980	1.978	34.051	27.213	36.427	45.229	341	-6.	28.8	1.27	21.5				
103	81	80	0.829	0.826	34.088	27.323	36.601	45.464	340	5.	42.1	1.56	23.4	721.	2157.	2316.	
104	119	118	-0.368	-0.372	34.150	27.438	36.785	45.713	327	28.	65.5	2.00	27.1				
105	150	148	-0.499	-0.504	34.204	27.488	36.842	45.776	314	43.	72.3	2.11	28.6				
106	200	198	-0.222	-0.229	34.311	27.561	36.897	45.814	280	74.	78.7	2.20	31.2	1022.	2211.	2320	
107	250	248	0.114	0.105	34.397	27.614	36.929	45.826	258	92.	82.8	2.25	32.4				
108	300	297	0.355	0.343	34.454	27.647	36.947	45.829	244	104.	85.3	2.27	32.7	1092.	2225.	2325	
109	350	346	0.590	0.575	34.516	27.683	36.969	45.838	231	115.	89.4	2.25	32.6				
110	400	396	0.698	0.680	34.561	27.713	36.992	45.854	223	122.	92.8	2.26	32.6	1112.	2235.	2334	
111	476	471	0.604	0.583	34.598	27.749	37.032	45.900	222	123.	100.1	2.22	32.5				
112	551	545	0.665	0.640	34.636	27.776	37.056	45.919	216	129.	106.1	2.22	32.2				
113	652	645	0.669	0.639	34.658	27.794	37.073	45.936	213	132.	109.4	2.22	32.2				
114	752	744	0.627	0.592	34.668	27.805	37.086	45.952	213	132.	113.3	2.22	32.3	1087.	2252.	2357	
115	904	894	0.605	0.561	34.687	27.822	37.105	45.972	212	133.	117.6	2.21	32.2				
116	1055	1042	0.508	0.457	34.681	27.823	37.112	45.985	214	132.	118.2	2.24	32.2	1090.	2246.	2350	
153	1206	1191	0.389	0.330	34.675	27.826	37.123	46.003	216	131.	120.2	2.24	32.5				
118	1406	1389	0.328	0.257	34.676	27.831	37.132	46.016	218	130.	124.2	2.24	32.5	1083.	2251.	2357	
119	1612	1591	0.234	0.151	34.675	27.836	37.143	46.033	221	128.	123.4	2.25	32.3				
120	1815	1791	0.155	0.060	34.672	27.838	37.151	46.046	223	127.	125.7	2.26	32.5				
121	2018	1990	0.103	-0.006	34.668	27.839	37.155	46.054	225	126.	126.0	2.25	32.5	1090.	2252.	2357	
122	2220	2188	-0.001	-0.122	34.664	27.841	37.165	46.070	231	121.	126.0	2.26	32.5				
123	2423	2387	-0.061	-0.196	34.661	27.843	37.171	46.080			126.1	2.26	32.6				
124	2656	2616	-0.121	-0.273	34.658	27.844	37.177	46.090	233	120.	126.8	2.26	32.5	1077.	2253	2360	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 115 Latitude 57-17.1 S Longitude 32-41.8 W Date 2/ 7/84 Bottom Depth 3923 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
									- - -	- - -	uM/KG	- - -	- - -				
229	1	1	2.437	2.437	33.978	27.118	36.308	45.087	336	-5.	23.8	1 42	22 4	653	2130	2302	
117	3	3	2 372	2 372	33.976	27.122	36.315	45.098	337	-6.	21.3	1 44	22.8				
230	26	25	2.417	2.416	33.979	27.120	36 312	45.092	336	-5.	22.6	1 43	22.4	653	2130	2302	
236	55	55	2.390	2.387	33.978	27.122	36.315	45.097	336	-5	22.4	1 44	22.5				
237	87	87	1.339	1.335	34.036	27.248	36.498	45.334	334	6.	35.2	1 75	24.4				
238	118	117	0.392	0.387	34.122	27.377	36 679	45.565	316	32	53.2	2 04	27 4				
239	147	146	0.400	0.394	34.222	27.457	36.758	45.641	284	64.	63.2	2.20	30 4				
240	176	174	0.713	0.706	34.308	27.508	36.789	45.655	254	91	69.1	2.29	32.5				
241	215	213	1.077	1.067	34.403	27 561	36.820	45.665	226	116	76.0	2 34	33.5				
242	255	253	1.357	1.345	34.475	27.600	36.842	45.671	209	130.	83.3	2 34	33.8				
243	296	293	1.320	1.306	34.506	27 628	36.871	45.702	207	132	83.3	2 34	33.8				
244	345	342	1.505	1.488	34.558	27.656	36.889	45.709	196	141.	86.0	2 34	33.7				
245	396	392	1.636	1.615	34.608	27.687	36.912	45.724	190	146.	88.9	2.31	33.5				
246	449	444	1.793	1.769	34.646	27.706	36.922	45.725	183	152.	91.0	2.29	33 3				
247	499	494	1.675	1.648	34.651	27 719	36.941	45.751	188	148.	92.8	2 25	33.0				
248	549	544	1.579	1.550	34.659	27.733	36.961	45.775	191	146.	94.7	2 25	32.8				
102	600	594	1.572	1.540	34.675	27.746	36 974	45.790	190	147	95.4	2 24	32.6				
103	651	644	1.510	1.475	34.678	27.754	36.985	45.804	193	144	97.7	2 22	32 5				
104	703	695	1.442	1.404	34.683	27.763	36.998	45.820	194	144.	99.7	2 23	32.5				
105	753	745	1.400	1.360	34 692	27.773	37.011	45.835	195	143.	101.7	2 22	32.4				
106	806	797	1.345	1.302	34.691	27.776	37.017	45.845	197	142	102.8	2 21	32.4				
107	904	894	1.349	1.300	34.707	27.789	37.030	45.858	195	144.	105.8	2 21	32 2				
108	1007	996	1.249	1.194	34 708	27.797	37.044	45.877	198	142	109 1	2 20	32.2				
109	1158	1144	1.017	0.955	34.697	27.805	37.065	45.911	203	139.	111 4	2 22	32 2				
110	1310	1294	0.841	0.771	34.696	27.816	37.087	45.943	208	135.	115 1	2 22	32 2				
111	1462	1444	0.704	0.625	34.691	27.821	37.101	45.964	211	134.	118.6	2 22	32.4				
112	1614	1594	0.547	0.460	34.682	27.824	37.113	45.986	214	132.	120.9	2.23	32.4				
113	1766	1743	0.455	0.359	34.681	27.829	37.124	46.002	216	131	122 9	2 23	32.5				
114	1967	1940	0.352	0.243	34.678	27.833	37.135	46.020	219	129	124.3	2 25	32 6				
115	2169	2139	0.240	0.118	34.671	27.834	37.144	46.035	221	128.	125 5	2 26	32 7				
116	2371	2337	0.130	-0.005	34.665	27.836	37.153	46.051	224	127.	126.1	2 27	32.9				
153	2574	2536	0.077	-0.073	34.665	27.840	37.160	46.063	227	124.	126 0	2 26	32.9				
118	2778	2735	0.018	-0.147	34.664	27.843	37.168	46.074	229	123.	126.8	2 25	32.9				
119	2979	2932	-0.045	-0.226	34.662	27.845	37.175	46.086	233	120.	126.7	2 25	33 0				
120	3182	3130	-0.067	-0.264	34.660	27.845	37 177	46.090	235	118.	126 5	2 21	32.8				
121	3385	3328	-0 089	-0.304	34.657	27.845	37 179	46.095	236	117	126.0	2 20	32.8				
122	3588	3526	-0.094	-0.328	34.657	27.846	37.182	46.099	236	118.	126 8	2 21	32.7				
123	3792	3725	-0 091	-0.344	34.658	27.848	37.184	46.102	236	118	127.7	2 26	32.8				
124	3966	3894	-0 098	-0 368	34.657	27.848	37.186	46.105	237	117.	129 2	2.25	32.7				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 116 Latitude 56-48.5 S Longitude 34-17.8 W Date 2/ 7/84 Bottom Depth 3247 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
230	2	2	2.641	2.641	33.923	27.057	36.237	45.007	333	-4.	14.7	1.46	22.1	644.	2119.	2291.	2119
117	4	4	2.653	2.653	33.916	27.050	36.229	44.999	333	-4.	13.1	1.51	22.3				
236	27	27	2.639	2.637	33.923	27.057	36.237	45.007	333	-4.	12.8	1.56	22.2				
235	28	27	2.639	2.637	33.924	27.058	36.238	45.008	334	-5.	13.5	1.57	22.2	647.	2121.	2293	
237	58	57	2.627	2.624	33.923	27.058	36.239	45.010	333	-4.	13.9	1.66	22.4				
238	88	87	0.731	0.727	34.013	27.269	36.554	45.423	314	32.	36.8	2.03	27.8				
239	118	117	1.054	1.049	34.168	27.373	36.637	45.487	267	75.	47.8	2.24	31.6				
240	148	147	1.288	1.281	34.252	27.425	36.675	45.510	243	97.	55.0	2.36	33.0	1063.	2207.	2308	
241	178	176	1.583	1.574	34.321	27.460	36.692	45.511	223	114.	61.4	2.41	33.8				
242	218	216	1.850	1.839	34.416	27.516	36.732	45.536	199	136.	70.5	2.45	34.5				
243	258	256	1.981	1.967	34.462	27.543	36.751	45.547	191	143.	74.4	2.45	35.2	1178.	2240.	2330	
244	298	296	2.052	2.036	34.520	27.584	36.787	45.579	182	151.	79.5	2.45	34.7				
245	348	345	2.058	2.039	34.546	27.605	36.807	45.598	181	152.	81.9	2.45	34.9				
246	400	396	2.064	2.042	34.570	27.624	36.826	45.616	179	154.	84.4	2.42	34.4	1195.	2252.	2341	
247	451	446	2.041	2.016	34.596	27.647	36.850	45.641	178	155.	86.8	2.42	34.2				
248	501	496	2.012	1.984	34.627	27.674	36.878	45.671	178	155.	89.8	2.39	34.1				
102	554	549	1.982	1.951	34.645	27.691	36.897	45.691	178	155.	92.1	2.37	33.5	1170.	2251.	2344	
103	654	647	1.930	1.893	34.666	27.713	36.921	45.718	180	154.	95.5	2.36	33.1				
104	755	747	1.868	1.825	34.684	27.732	36.944	45.744	180	154.	100.2	2.34	32.8				
105	806	797	1.810	1.764	34.693	27.744	36.959	45.762	183	152.	103.6	2.33	32.6	1137.	2251.	2349	
106	857	848	1.776	1.727	34.697	27.750	36.967	45.772	184	151.	105.5	2.33	32.5				
107	959	948	1.687	1.632	34.703	27.762	36.984	45.794	186	150.	107.5	2.32	32.4	1115.	2252.	2353	
108	1058	1046	1.640	1.579	34.708	27.770	36.995	45.808	186	150.	101.9	2.32	32.2				
109	1159	1145	1.540	1.473	34.711	27.780	37.011	45.829	191	146.	104.4	2.31	32.0	1104.	2253.	2356.	2250
110	1261	1246	1.465	1.392	34.715	27.789	37.025	45.847	193	145.	106.0	2.31	32.1				
111	1362	1345	1.394	1.314	34.715	27.795	37.035	45.861	195	144.	107.9	2.25	32.0	1084.	2250.	2355	
112	1513	1494	1.310	1.221	34.712	27.799	37.044	45.876	197	142.	109.9	2.25	32.1				
113	1663	1642	1.194	1.095	34.709	27.805	37.057	45.896									
114	1665	1643	1.194	1.095	34.709	27.805	37.058	45.896	200	141.	113.1	2.27	32.0	1089.	2252.	2357	
115	1815	1791	0.928	0.822	34.694	27.811	37.079	45.932	206	137.	115.7	2.27	32.0				
116	1967	1941	0.852	0.735	34.699	27.821	37.094	45.951	208	136.	119.6	2.27	32.1				
153	2120	2091	0.722	0.596	34.694	27.825	37.106	45.972	211	134.	120.6	2.27	32.4	1078.	2250.	2356.	2253
118	2323	2290	0.571	0.432	34.686	27.829	37.119	45.994	214	133.	123.3	2.29	32.4				
119	2524	2487	0.470	0.316	34.679	27.830	37.127	46.008	216	132.	124.9	2.29	32.5				
120	2728	2687	0.376	0.208	34.677	27.834	37.138	46.025	219	130.	125.7	2.30	32.5	1086.	2250.	2355	
121	2931	2885	0.326	0.141	34.676	27.837	37.145	46.035	221	128.	125.9	2.29	32.5				
122	3134	3084	0.198	-0.002	34.671	27.841	37.157	46.055	225	126.	127.3	2.32	32.7				
124	3261	3208	0.079	-0.129	34.665	27.843	37.167	46.072	230	122.	128.3	2.34	32.8				
123	3261	3208	0.080	-0.128	34.665	27.843	37.166	46.072	229	123.	128.1	2.33	32.8	1079.	2249.	2355.	2253

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 117 Latitude 56-57.0 S Longitude 36-24.7 W Date 2/ 8/84 Bottom Depth 3573 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
									- - -	- - -	uM/KG	- - -	- - -				
230	7	7	2.712	2.712	33.970	27.088	36 263	45.029	336	-7.	19.4	1 36	21.9				
117	10	10	2 702	2 701	33.971	27.090	36 266	45.032	333	-4.	17.6	1.38	21.8				
237	22	22	2 711	2 710	33.968	27.087	36 262	45.028	333	-4.	19.2	1 36	21.9				
238	47	47	2.708	2.705	33.971	27.090	36 265	45.031	334	-5.	18.8	1 35	22.0				
239	73	72	2 315	2 311	34.001	27.147	36.343	45.129	332	0.	26.1	1 56	23.1				
240	99	98	0.561	0.557	34.104	27.352	36.646	45.522	326	21.	51.3	1 96	25.8				
241	124	123	0.444	0.439	34.187	27.426	36.725	45.607	291	57.	59.4	2 17	30.0				
242	148	147	0 927	0 921	34.274	27 467	36.736	45.591	258	85.	61.8	2.29	32 4				
243	178	177	1.564	1.555	34.385	27.513	36.744	45.563	211	126	67 7	2 40	34 2				
244	219	217	0 677	0 668	34.347	27.541	36.824	45.691	248	97.	74.0	2 34	33 0				
245	259	257	1.180	1.168	34.445	27.588	36.841	45.679	218	123.	79.3	2 38	33.6				
246	300	297	1.240	1.226	34.498	27 627	36.875	45.710	211	129	83.0	2.39	33 6				
247	350	347	1 460	1 442	34.556	27.658	36.893	45.715	202	136	86 2	2.38	33.7				
102	402	398	1 597	1.576	34.607	27.689	36 916	45.731	191	146.	90.1	2 34	33.5				
248	451	447	1.569	1.545	34.627	27.708	36.936	45.752	193	144.	92.0	2 35	33.1				
103	477	472	1.587	1.562	34.642	27 718	36.946	45.760	191	146	93 6	2.30	33.0				
104	552	547	1.568	1.539	34.667	27.740	36.968	45.784	191	146.	96.3	2 29	32 6				
105	628	622	1.501	1.468	34.676	27 753	36.984	45.803	192	145.	99.2	2 27	32 5				
106	705	697	1.432	1.394	34.687	27.767	37.003	45.825	194	144.	101.5	2 28	32 4				
107	803	794	1.396	1.353	34.704	27 783	37.021	45.846	194	144.	105.1	2.24	32.2				
108	903	893	1.241	1.193	34.700	27.791	37.038	45.871	199	141.	107.6	2.24	32 0				
109	1004	992	1.093	1.040	34.694	27 797	37.053	45.894	202	139.	109.3	2 25	31 9				
110	1105	1092	1 043	0 984	34.701	27.806	37.065	45.909	203	139	112 7	2 25	31.7				
111	1258	1243	0 923	0 855	34.702	27.815	37.082	45.933	207	136.	116.8	2.25	32 0				
112	1409	1391	0 705	0 630	34.690	27.820	37.099	45.963	211	134.	118.7	2.26	32.1				
113	1559	1539	0.597	0.513	34.687	27.825	37.111	45.981	212	134.	122.0	2 25	32 2				
114	1713	1691	0.459	0.366	34.682	27.829	37.124	46.002	216	131.	123.6	2 26	32 3				
115	1865	1840	0 360	0 258	34.678	27.832	37.133	46.017	218	130.	125.2	2 28	32 4				
116	2068	2039	0.248	0.134	34.672	27.834	37 143	46.033	222	127.	125.0	2 30	32 5				
153	2271	2239	0.177	0.049	34.672	27.839	37.152	46.048	223	127	127 4	2 31	32.5				
118	2473	2437	0.109	-0.034	34.669	27.841	37 159	46.059	224	127.	127 7	2 32	32 8				
119	2670	2630	0.041	-0.116	34.666	27.843	37.166	46.070	228	124.	128.7	2 32	32.9				
120	2874	2829	-0.028	-0.200	34.663	27 844	37 173	46.082	232	120.	128.6	2 32	32.8				
121	3077	3028	-0.091	-0.279	34.661	27.847	37.180	46.094	235	118	128 8	2 32	32.7				
122	3280	3226	-0 157	-0 361	34.659	27.849	37.187	46.106	239	115.	127.9	2 31	32 8				
123	3482	3423	-0.202	-0.423	34.655	27.849	37 191	46.113	241	114.	128.0	2 30	32 8				
124	3630	3568	-0 230	-0.464	34.656	27.852	37 196	46.120	242	113.	127.6	2 26	32 6				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 118 Latitude 57-38.6 S Longitude 38-37.1 W Date 2/ 8/84 Bottom Depth 3359 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	1	-9	2.654	2.654	33.893	27.032	36.211	44.981	340	-11.	16.3	1.44	21.0				
117	3	3	2.656	2.656	33.892	27.031	36.210	44.980	339	-10.	12.0	1.49	22.0	634.	2117.	2292	
235	22	22	2.613	2.612	33.892	27.034	36.216	44.988	340	-10.	15.8	1.46	20.5				
236	47	47	2.604	2.601	33.892	27.035	36.218	44.990	338	-8.	14.9	1.47	21.2				
237	73	72	2.020	2.016	33.920	27.105	36.319	45.121	336	-1.	23.7	1.72	23.4	715.	2138.	2295	
238	99	98	0.297	0.293	34.018	27.298	36.608	45.501	317	33.	39.5	2.06	28.2				
239	119	118	0.711	0.706	34.127	27.362	36 646	45 515	283	62	46 4	2 22	30 6				
240	147	145	1.303	1.296	34.241	27.415	36.664	45.499	248	92.	52.9	2.31	32.5	1038.	2202.	2306	
241	177	175	1.536	1.527	34.308	27.453	36.688	45.509	228	110.	59.4	2.34	33.5				
242	218	215	1.610	1.599	34.375	27.501	36.731	45.548	212	125.	63.6	2.42	34.3				
243	257	255	1.883	1.869	34.437	27.531	36.744	45.546	196	138.	68.3	2.44	34.7				
244	298	295	1.830	1.814	34.468	27.560	36.776	45.580	193	142.	71.6	2.44	34.7	1199	2238.	2325	
245	349	345	1.877	1.858	34.512	27.592	36.805	45.606	188	146.	76.3	2.44	34.5				
246	399	395	1.709	1.688	34.520	27.611	36.833	45.643	192	144.	78.7	2.44	34.4				
247	449	445	1.907	1.882	34.581	27.645	36.856	45.654	183	151.	81.9	2.42	34.2				
248	500	495	1.910	1.882	34.604	27.664	36.874	45.672	182	152.	85.3	2.42	33.8				
102	503	498	1.908	1.880	34.608	27.667	36.877	45.676	181	153.	86.9	2.41	33.7	1180.	2248.	2339	
103	553	548	1.871	1.840	34.628	27.686	36.898	45.698	182	152.	89.2	2.39	33.5				
104	604	598	1.821	1.787	34.649	27.707	36.922	45.724	183	152.	91.6	2.38	33.3	1154.	2248.	2343	
105	654	647	1.827	1.790	34.663	27.718	36.932	45.734	183	152.	93.9	2.35	33.2				
106	704	697	1.855	1.815	34.684	27.733	36.945	45.746	183	151.	96.0	2.34	32.9				
107	751	743	1.849	1.806	34.691	27.739	36.952	45.753	182	152.	97.3	2.33	32.9	1140.	2251.	2348	
108	802	793	1.788	1.742	34.696	27.748	36.964	45.769	184	151.	95.8	2.32	32.7				
109	901	891	1.724	1.672	34.706	27.761	36.982	45.789	186	149.	98.4	2.29	32.5				
110	999	987	1.636	1.579	34.716	27.776	37.002	45.814	189	147.	102.6	2.27	32.4	1097.	2253.	2356.	
111	1101	1088	1.492	1.429	34.712	27.784	37.018	45.838	192	146.	105.2	2.28	32.4				
112	1252	1237	1.393	1.321	34.721	27.799	37.039	45.865	195	143.	109.0	2.27	32.2				
113	1403	1386	1.213	1.132	34.715	27.807	37.058	45.894	199	141.	112.4	2.27	32.2	1085.	2254.	2360	
114	1553	1533	1.058	0.969	34.710	27.814	37.074	45.919	204	138.	115.3	2.27	32.2				
115	1705	1683	0.859	0.762	34.703	27.822	37.094	45.950	208	135.	119.6	2.29	32.4				
116	1857	1833	0.704	0.598	34.693	27.824	37.105	45.971	212	133.	120.9	2.29	32.5	1077.	2251.	2358	
153	2007	1980	0.548	0.433	34.686	27.828	37.119	45.994	217	130.	123.1	2.30	32.5				
118	2207	2176	0.439	0.311	34.682	27.832	37.130	46.011	218	130.	123.9	2.31	32.7				
119	2386	2352	0.350	0.210	34.678	27.835	37.139	46.025	221	128.	125.3	2.31	32.6	1090.	2250.	2355	
120	2589	2550	0.227	0.073	34.669	27.835	37.147	46.041	224	126.	123.9	2.36	33.0				
121	2791	2748	0.181	0.011	34.671	27.840	37.156	46.053	226	124.	125.4	2.32	32.7	1081.	2251.	2357	
122	2993	2945	0.128	-0.058	34.668	27.841	37.161	46.063	228	123.	125.9	2.32	32.6				
123	3195	3143	0.085	-0.117	34.667	27.844	37.167	46.072	230	122.	126.8	2.33	32.6	1085.	2248.	2353	
124	3403	3346	0.001	-0.218	34.665	27.847	37.176	46.087	232	121.	127.9	2.33	32.6	1085.	2250.	2356	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 119 Latitude 58-12.5 S Longitude 40- 4.2 W Date 2/ 9/84 Bottom Depth 3396 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
230	2	2	2.624	2 624	33.953	27.082	36.262	45.033	342	-13	18.6	1.34	21.0				
117	3	3	2.669	2 669	33.987	27.106	36.283	45.051	339	-10	20.9	1.27	20 7				
236	24	24	2.631	2 630	33.957	27.085	36.265	45.035	343	-14.	18.1	1.32	20 9				
237	50	49	2.462	2 459	34.112	27.223	36.410	45.186	334	-4.	26.5	1.27	21 3				
238	74	74	2.416	2 412	34.123	27.236	36.425	45.204	332	-1	27.0	1.34	21 6				
239	101	100	0.888	0.884	34.226	27.431	36.703	45.560	299	45	58.9	2.09	27.7				
240	131	130	0.593	0.588	34.303	27.511	36.799	45.671	269	77	69.8	2.35	30 4				
241	159	158	0.680	0.673	34.367	27.557	36.839	45.706	248	97	74.9	2.44	32 4				
242	189	187	0.803	0.795	34.430	27.600	36.875	45.733	241	103	80.7	2.42	32 9				
243	229	227	1.200	1.189	34.508	27.637	36.887	45.724	219	121	83.2	2.39	33 3				
244	276	274	1.394	1.380	34.588	27.688	36.926	45.751	203	135	87.8	2.36	33 3				
245	328	325	1.561	1.544	34.631	27.711	36.939	45.755	200	137	88.6	2.34	32 8				
246	377	373	1.685	1.665	34.659	27.724	36.946	45.754	192	144	89.5	2.33	32 9				
247	428	423	1.676	1.653	34.682	27.744	36.965	45.774	187	149	92.5	2.30	32 5				
102	475	470	1.173	1.150	34.635	27.742	36.992	45.829	208	132	96 3	2.26	32 4				
248	478	473	1.526	1.501	34.678	27.752	36.982	45.799	193	144	93.4	2.29	32 5				
103	526	521	1.155	1.129	34.653	27.758	37.009	45.847	207	133	98.7	2.26	32.3				
104	577	571	1.178	1.149	34.671	27.771	37.021	45.857	205	135.	101.1	2.25	32 1				
105	628	621	1.175	1.143	34.680	27.778	37.029	45.865	204	136	102.6	2.25	32 1				
106	703	695	0.850	0.816	34.661	27.785	37.054	45.908	216	127	104 6	2 25	32 1				
107	776	767	0.829	0.791	34.670	27 794	37.064	45.919	213	130	107.4	2.26	32 1				
108	853	843	0.771	0.729	34.671	27.798	37.073	45.931	213	131	109.2	2.26	32 1				
109	928	918	0.695	0.649	34.672	27.804	37.083	45.945	215	130	110.9	2.26	32 0				
110	1004	993	0.615	0.566	34.671	27.809	37.092	45.959	215	130	113 8	2 26	31 9				
111	1157	1143	0.390	0.334	34.662	27.815	37 112	45.992	220	127	115.9	2.27	32 2				
112	1309	1293	0.321	0.256	34.666	27.823	37.124	46.008	219	129	119.9	2.27	32 4				
113	1461	1442	0.220	0.147	34.664	27.827	37.135	46.025	221	128	121.9	2.30	32 5				
114	1612	1592	0.160	0.078	34.665	27.832	37.143	46.037	221	129	123.6	2.34	32 2				
115	1763	1740	0.123	0.032	34.665	27.834	37.149	46.045	222	128	124.2	2.30	32 4				
116	1916	1890	0.072	-0.029	34.664	27.837	37.155	46.054	223	128	124.4	2.31	32 5				
153	2067	2038	0.032	-0.079	34.664	27.839	37.160	46 063	225	126	125.9	2.33	32 8				
118	2271	2238	-0.020	-0.145	34.664	27.843	37 167	46.074	229	123	126.5	2.32	32 7				
119	2473	2436	-0.083	-0.222	34.663	27.846	37.175	46.086	232	121	125.9	2.31	32 7				
120	2677	2636	-0.153	-0.306	34.661	27.848	37.183	46.098	235	118	125.9	2.30	32 5				
121	2878	2833	-0.205	-0.374	34.658	27.849	37.188	46.107	239	115	126.1	2.31	32 7				
122	3080	3030	-0.240	-0.425	34.656	27.850	37.192	46.114	240	115	125.5	2.30	32 6				
123	3283	3229	-0.282	-0.483	34.653	27.850	37.195	46.121	242	113	125.1	2.30	32 5				
124	3433	3375	-0.305	-0.519	34.653	27.852	37.199	46.127	244	111	124 2	2 29	32 4				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 120 Latitude 58-49.6 S Longitude 41-36.2 W Date 2/ 9/84 Bottom Depth 2961 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	2	2	1.986	1.986	34.125	27.272	36.484	45.285	334	0.	41.9	1.50	23.1	685.	2143.	2309	
102	31	30	1.956	1.954	34.137	27.284	36.498	45.300	334	1.	42.4	1.50	22.9	679.	2144.	2312	
103	60	59	0.564	0.562	34.282	27.495	36.786	45.659	309	37.	75.7	1.98	26.5				
104	90	89	0.457	0.453	34.427	27.619	36.912	45.790	264	83.	85.1	2.29	31.5				
105	120	119	0.622	0.617	34.503	27.670	36.953	45.820	245	100.	88.7	2.31	32.6				
106	160	158	0.732	0.725	34.544	27.697	36.973	45.833	237	107.	91.2	2.29	32.7	1106.	2229.	2328	
107	200	198	0.652	0.644	34.576	27.727	37.008	45.872	231	114.	94.5	2.28	32.6				
108	250	248	1.037	1.025	34.636	27.751	37.009	45.852	212	129.	96.7	2.26	32.6				
109	301	298	1.012	0.998	34.649	27.764	37.022	45.867	211	131.	98.6	2.26	32.5	1102.	2245.	2347	
110	377	373	1.108	1.090	34.681	27.783	37.036	45.875	205	136.	102.9	2.25	32.2				
111	452	447	1.001	0.979	34.687	27.795	37.055	45.899	205	137.	107.0	2.24	32.1				
112	552	546	0.827	0.801	34.683	27.804	37.073	45.927	211	132.	110.4	2.23	32.1	1082.	2244.	2349	
113	672	665	0.706	0.674	34.685	27.813	37.090	45.951	212	132.	114.7	2.24	32.1				
114	800	791	0.470	0.433	34.673	27.818	37.109	45.983	217	130.	117.4	2.24	32.3	1076.	2251	2358	
115	951	940	0.306	0.262	34.666	27.822	37.123	46.007	221	127.	118.6	2.26	32.4				
116	1102	1089	0.313	0.260	34.677	27.831	37.132	46.016	219	129.	122.3	2.28	32.5	1087.	2249.	2354	
153	1339	1323	0.126	0.061	34.668	27.835	37.148	46.042	222	128.	123.6	2.29	32.8				
118	1560	1540	0.075	-0.003	34.667	27.838	37.154	46.052	224	127.	125.1	2.28	32.8	1091.	2250	2354	
119	1816	1792	-0.020	-0.113	34.664	27.841	37.164	46.069	228	124.	125.7	2.29	32.7				
120	2070	2041	-0.120	-0.229	34.661	27.844	37.174	46.085	233	120.	125.0	2.30	32.8	1098.	2250.	2353	
121	2324	2290	-0.170	-0.296	34.659	27.846	37.180	46.095	235	118.	125.2	2.28	32.9				
122	2578	2539	-0.226	-0.370	34.658	27.849	37.187	46.106	239	115.	125.2	2.28	32.7	1076.	2241	2347	
123	2831	2787	-0.291	-0.454	34.661	27.855	37.198	46.122	242	113.	123.7	2.27	32.6				
124	2982	2935	-0.425	-0.597	34.651	27.854	37.206	46.138	248	108.	121.9	2.26	32.4	1063.	2245.	2353	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 121 Latitude 59-19.0 S Longitude 43- 7 4 W Date 2/10/84 Bottom Depth 4025 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	2	2	2.142	2.142	33.984	27.146	36.353	45.147	332	1	25.0	1.46	22.8				
117	4	4	2.144	2.144	33.986	27.148	36.354	45.148	333	0	25 4	1 44	23 1	674	2131	2297	
235	26	25	2.134	2.133	34.001	27.161	36.367	45.162	331	2	27.1	1.51	23.1				
236	57	56	0.765	0.763	34.289	27.489	36 767	45.630	286	59	72.4	2.18	30.1				
237	87	86	0.821	0.817	34.406	27.580	36.853	45.711	266	78.	82 2	2.27	31 4				
238	116	115	0.823	0.818	34.455	27.619	36.891	45.749	255	89	86.7	2.29	31.9				
239	156	155	0.819	0.812	34.508	27.662	36.934	45.790	245	99	90.4	2.29	32.0				
240	194	192	1.256	1.247	34.588	27.698	36.943	45.775	210	129	91 3	2 33	32 8				
241	233	231	1.456	1.444	34.637	27.723	36.957	45.778	198	140.	94.3	2.33	32.8				
242	268	266	1 586	1.572	34.672	27.742	36.968	45.781	191	145.	96 0	2 31	32 7				
243	319	316	1.642	1.625	34.696	27.757	36.980	45.790	188	148.	95.9	2.30	32.4				
244	369	366	1.659	1.640	34.712	27.769	36.990	45.800	186	150	98.7	2.29	32.3				
245	420	416	1.563	1 541	34.715	27.778	37.006	45.820	189	148.	100.3	2.29	32.2				
246	471	466	1.380	1.356	34.703	27.782	37.020	45.844	196	142.	102.3	2.29	32.1				
247	521	516	1.164	1.138	34.690	27.787	37.037	45.873	203	137.	104.3	2.29	32.1				
248	571	565	1.087	1.059	34.691	27.793	37.048	45.888	206	135	106.0	2.29	32.2				
102	620	614	1 056	1.025	34.692	27.796	37.053	45.895	206	135.	109.1	2.23	32.7				
103	695	688	0.851	0.817	34.680	27.800	37.069	45.922	212	131.	111 5	2 24	32 6				
104	772	763	0.722	0.685	34.675	27.804	37.081	45.942	215	129.	114.1	2.23	32.7				
105	849	840	0.818	0.776	34.694	27.814	37.085	45.940	209	134	117 8	2 25	32 7				
106	952	941	0.727	0.680	34.693	27.819	37.096	45.956	211	133	120.7	2.25	32.8				
107	1055	1042	0.323	0.273	34.659	27.816	37.116	46.000	226	122.	118 5	2 25	32 9				
108	1207	1192	0.268	0.210	34.664	27.824	37.128	46.015	223	126.	122 5	2 27	33 0				
109	1357	1340	0.409	0.340	34.688	27.836	37.131	46.011	216	131.	127.9	2.26	33.1				
110	1510	1491	0.120	0.045	34.661	27.830	37.144	46.040	220	130.	126.0	2.31	33.5				
111	1664	1642	0.111	0.026	34.665	27.834	37.149	46.046	216	134	129.7	2 31	34 1				
112	1817	1793	0.092	-0.003	34.667	27.838	37.154	46.052	224	127.	128 3	2 29	33 4				
113	1970	1942	0.036	-0.068	34.666	27.840	37 161	46.063	225	126	129 5	2 29	33 5				
114	2122	2092	-0 007	-0.121	34.665	27.842	37.166	46.071	225	127.	129.8	2.31	33.8				
115	2325	2291	-0.034	-0.163	34.663	27.843	37.169	46.076	228	124.	130.9	2 33	33 6				
116	2527	2489	-0.089	-0.232	34.661	27.844	37.175	46.086	232	121	128 8	2 32	33 2				
153	2730	2688	-0.144	-0.302	34.661	27.848	37.182	46.097	235	118	127 6	2 31	33 1				
118	2934	2887	-0 173	-0 347	34.658	27.848	37.185	46.102	238	116	126.0	2.30	32.8				
119	3138	3086	-0 229	-0.419	34.656	27.850	37 191	46.113	241	114	126.3	2.29	32.9				
120	3341	3285	-0 269	-0.476	34.656	27.852	37.197	46.122	243	112	125.2	2 29	32 8				
121	3544	3483	-0 295	-0 519	34.654	27.853	37.200	46.127	245	110	125.3	2.29	32.8				
122	3749	3682	-0 326	-0.568	34.651	27.852	37.203	46.133	247	109.	124.5	2.28	33.0				
123	3953	3881	-0 341	-0.603	34.652	27.855	37.207	46.139	248	108	122.1	2 26	32 7				
124	4092	4016	-0.385	-0.659	34.649	27.855	37.211	46.146	250	107.	119.7	2.26	32.4				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 122 Latitude 59-58.8 S Longitude 44-58.1 W Date 2/10/84 Bottom Depth 5012 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - - -		uM/KG -	- - - - - -		uatm	uM/kg	uEq/kg	uM/kg
230	1	1	1.336	1.336	34.195	27.376	36.623	45.457	334	6.	65.9	1.65	24.2	722.	2166.	2327.	2161.
117	2	2	1.448	1.448	34.188	27.362	36.603	45.431	336	3.	62.2	1.70	24.5				
231	26	26	1.349	1.348	34.198	27.377	36.624	45.457	334	6.	63.5	1.67	24.6	735.	2169.	2327	
232	57	56	1.122	1.119	34.268	27.449	36.707	45.551	318	23.	65.7	1.86	27.3				
233	77	76	0.829	0.826	34.362	27.544	36.817	45.675	285	59.	79.2	2.09	30.1				
234	96	95	0.719	0.715	34.415	27.593	36.872	45.735	267	78.	84.0	2.17	31.3	1021.	2221.	2331	
236	121	120	0.681	0.676	34.466	27.637	36.917	45.782	252	93.	87.2	2.22	31.9				
235	121	120	0.681	0.676	34.464	27.635	36.915	45.780	253	92.	86.8	2.22	31.9				
237	147	145	0.555	0.549	34.502	27.673	36.961	45.831	259	87.	91.0	2.25	31.6				
238	177	175	0.046	0.039	34.490	27.693	37.010	45.908	295	56.	95.7	2.12	30.2				
239	217	215	-0.409	-0.416	34.488	27.714	37.058	45.982	286	69.	100.5	2.15	30.8				
240	257	255	-0.538	-0.546	34.512	27.739	37.090	46.022	272	84.	103.7	2.20	31.6	1028.	2233.	2344	
241	297	294	-0.314	-0.324	34.551	27.760	37.098	46.016	267	87.	102.9	2.17	31.6				
242	348	345	-0.331	-0.343	34.567	27.774	37.112	46.031	253	101.	107.8	2.22	32.2				
243	398	394	-0.107	-0.122	34.597	27.787	37.112	46.018	250	102.	107.8	2.20	32.1				
244	474	469	-0.013	-0.032	34.615	27.797	37.116	46.017	238	113.	110.8	2.21	32.4	1077.	2246.	2351	
245	549	543	0.032	0.010	34.623	27.802	37.118	46.016	237	114.	111.7	2.20	32.4				
246	625	618	0.235	0.208	34.652	27.814	37.118	46.005	228	121.	115.1	2.21	32.3				
247	700	692	0.056	0.027	34.641	27.815	37.130	46.027	229	121.	117.0	2.25	32.7	1086.	2250.	2355	
248	776	767	0.377	0.342	34.675	27.825	37.121	46.001	221	126.	121.3	2.24	32.5				
102	856	847	0.340	0.301	34.677	27.829	37.128	46.009	219	129.	123.8	2.27	32.4	1080.	2256.	2363	
103	957	946	0.132	0.089	34.658	27.825	37.137	46.030	218	132.	123.1	2.30	33.1				
104	1108	1094	0.192	0.140	34.671	27.833	37.141	46.032	211	138.	127.5	2.33	33.4	1150.	2263.	2360.	2253.
105	1258	1243	0.107	0.047	34.668	27.836	37.149	46.045	219	131.	125.9	2.31	32.9				
106	1410	1392	0.075	0.007	34 667	27.837	37.153	46.051	219	131	127 3	2 33	33 2	1119	2262	2364	
107	1564	1544	0.040	-0.037	34.668	27.840	37.159	46.059	221	130.	129.3	2.34	33.3				
108	1716	1693	-0.018	-0.104	34.665	27.841	37.164	46.068	224	128.	129.1	2.35	33.3	1123.	2260.	2361.	
109	1867	1842	-0.049	-0.145	34.668	27.846	37.171	46.077	226	126.	128.9	2.35	33.2				
110	2066	2037	-0.103	-0.212	34.662	27.844	37.173	46.083	231	122.	128.1	2.33	33.0				
111	2270	2237	-0.141	-0.264	34.661	27.846	37.178	46.091	234	119.	127.4	2.32	33.4	1087.	2255.	2361	
112	2472	2435	-0.172	-0.309	34.662	27.849	37.184	46.099	238	115.	128.2	2.32	32.8				
113	2674	2633	-0.204	-0.356	34.660	27.850	37.187	46.106	239	115.	128.2	2.31	32.8				
114	2876	2830	-0.230	-0.398	34.657	27.849	37.189	46.110									
115	3079	3029	-0.257	-0.441	34.656	27.851	37.193	46.116	243	112.	128.4	2.31	32.6				
116	3336	3280	-0.306	-0.511	34.659	27.856	37.203	46.130	251	104.	123.6	2.30	32.5				
153	3592	3530	-0.334	-0.562	34.652	27.853	37.203	46.133	248	108.	121.8	2.28	32.3	1050.	2245.	2355.	
118	3848	3779	-0.366	-0.617	34.651	27.854	37.208	46.141	249	107.	120.2	2.27	32.3				
119	4104	4027	-0.372	-0.647	34.650	27.855	37.210	46.145	251	106.	122.3	2.27	32.3	1042.	2244.	2355	
120	4360	4276	-0.363	-0.665	34.649	27.855	37.211	46.147	252	105.	121.7	2.25	32.3				
121	4616	4525	-0.346	-0.675	34.647	27.854	37.211	46.147	253	104.	121.7	2.26	32.4	1033.	2245.	2358	
122	4871	4773	-0.326	-0.683	34.648	27.855	37.212	46.149	254	103.	121.7	2.26	32.4				
124	5092	4986	-0.307	-0.689	34.648	27.855	37.213	46.150	253	104.	121.3	2.27	32.3				
123	5092	4987	-0.307	-0.689	34.648	27.855	37.213	46.150	253	104.	121.7	2.25	32.3	1034.	2243.	2355.	2240

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 123 Latitude 59-50.9 S Longitude 46-41 1 W Date 2/11/84 Bottom Depth 4735 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	1	1	1 650	1.650	34.257	27.403	36.632	45.448	338	-1	69 7	1 68	25.6	734	2175	2335	
230	3	3	1 665	1 665	34.254	27.399	36.627	45.443	338	-1.	70 7	1 72	25 4				
231	22	22	1 609	1.608	34.254	27.404	36.635	45.453	339	-2.	70.5	1 75	25 3				
232	48	48	0 733	0.731	34.355	27.544	36.823	45.686	339	6	87 6	1 88	26 6				
233	73	73	0 473	0 470	34.402	27.597	36.891	45.768	329	18.	92.2	1.98	27.9				
234	99	98	0 228	0.224	34.445	27.646	36.953	45.843	318	31.	94.4	2.07	29 0				
235	123	122	-0 048	-0.052	34.486	27.694	37 017	45.921	306	46.	98.2	2.13	30.1				
236	148	146	-0 303	-0 308	34.507	27.724	37.061	45.979	295	59.	100.2	2 18	30 8				
237	172	171	-0 227	-0.233	34.522	27.732	37.065	45.978	293	60.	100.4	2 18	30 8				
238	197	195	-0 394	-0 401	34.529	27.746	37.089	46.011	286	69.	101.6	2 20	31 3				
239	222	220	-0.516	-0.523	34.534	27.756	37.105	46.035	283	73.	102.2	2.21	31 6				
240	247	245	-0.382	-0 390	34.551	27.763	37.105	46.027	276	79.	103.9	2 23	31 7				
241	271	268	-0 386	-0.395	34.557	27.768	37.110	46.032	274	81.	104.9	2 24	31 9				
242	296	293	-0.388	-0.398	34.564	27.774	37.116	46.038	272	83.	105.3	2 22	32.0				
243	347	343	-0 401	-0.413	34.575	27.784	37.126	46.049	260	95.	107.3	2 25	32 2				
244	396	392	-0.333	-0.347	34.589	27.792	37.130	46.049	257	97	108.7	2 26	32 3				
245	447	442	-0 277	-0.293	34.603	27.801	37.135	46.051	254	99.	110.1	2 25	32 4				
246	520	515	-0 217	-0.237	34 611	27.804	37.136	46.048	245	108.	111.4	2 26	32 5				
247	596	589	0 161	0 136	34.650	27 816	37.125	46.016	228	121.	116 4	2 27	32 6				
248	671	664	0 272	0.243	34.668	27.825	37.127	46.012	223	125.	120.0	2 27	32 6				
102	749	740	0.300	0 267	34.671	27.826	37.127	46.010	221	127.	122.5	2 19	33.0				
103	847	838	0 162	0 125	34.661	27.826	37.135	46.026	222	127.	123.2	2 21	32.9				
104	970	958	0.065	0.022	34.659	27.830	37.145	46.042	218	132.	124.4	2 31	33.4				
105	1095	1082	0.097	0 047	34.664	27.833	37.146	46.042	212	138	126 3	2 34	33.7				
106	1247	1231	0.054	-0 004	34.665	27.836	37.153	46.051	217	134.	127.5	2 32	33.5				
107	1400	1382	-0.007	-0.074	34.661	27.837	37.157	46.060	225	126	124 5	2 26	33.0				
108	1553	1533	-0.023	-0.099	34.661	27.838	37.160	46.064	226	125.	124.7	2 26	33.0				
109	1705	1683	-0.040	-0.125	34.662	27.840	37.164	46.069	228	124.	124.4	2 25	32.7				
110	1856	1831	-0.077	-0.172	34.663	27.843	37.170	46.077	230	122.	124.6	2 25	32.7				
111	2009	1981	-0 116	-0.220	34.661	27.844	37.173	46.084	231	122.	125.6	2 27	32.7				
112	2210	2179	-0 131	-0 249	34.661	27.845	37.177	46.089	232	121	127 6	2 27	32.6				
113	2412	2377	-0.160	-0.293	34.662	27.848	37.182	46.097	235	118.	127.3	2 28	32.5				
114	2612	2572	-0 176	-0.324	34.662	27.850	37.185	46.102	236	118.	128.2	2 28	32.5				
115	2813	2769	-0 195	-0.358	34.659	27.849	37 187	46.105	239	115.	127.3	2 31	32.5				
116	3017	2968	-0.218	-0.398	34.658	27.850	37.190	46.111	241	113.	127 0	2 32	32.5				
153	3271	3216	-0.245	-0 446	34.656	27 851	37.194	46.117	245	110.	125.7	2.31	32.4				
118	3525	3464	-0.279	-0 502	34.655	27 853	37.199	46.125	244	111.	123.1	2 30	32.3				
119	3780	3712	-0.306	-0.552	34.654	27.854	37.203	46.133	246	110.	121 2	2 29	32 2				
120	4034	3960	-0 317	-0.587	34.652	27.854	37.205	46.137	247	109.	120 3	2 30	32 0				
121	4290	4208	-0.334	-0.629	34.652	27.856	37 210	46.143	250	107.	118.7	2 28	32 1				
122	4544	4455	-0.342	-0.663	34.649	27.855	37.211	46 147	251	106	118 1	2 27	32 1				
124	4796	4700	-0.334	-0.683	34.649	27.856	37.213	46.150	252	105.	118.0	2 27	32 3				
123	4800	4703	-0.332	-0.681	34.648	27.855	37 212	46.149	252	105.	117.8	2 27	32 3				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 124 Latitude 59-17.5 S Longitude 47-41.2 W Date 2/11/84 Bottom Depth 3967 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	2	2	1 907	1.907	34.143	27.292	36.509	45.313	333	2	42.6	1 63	24.6	714	2162	2323	
117	4	3	1 909	1.909	34.140	27.290	36.506	45.310	331	4	43 8	1 60	24 5				
236	28	28	1 888	1.887	34.144	27 295	36.512	45.318	334	1	42 2	1 63	24 7				
237	59	59	0 777	0.775	34.423	27.596	36.872	45.731	265	79	79 0	2 31	31.8				
238	89	88	0 794	0.790	34 477	27.639	36.912	45.771	251	93	83 0	2 36	32 5				
239	119	118	0 821	0.816	34.529	27.679	36.950	45.806	243	100	86.6	2 34	32 6				
240	158	157	0 974	0.967	34.577	27.708	36.969	45.817	229	113	88 3	2 35	32.8				
241	183	181	0.988	0.980	34.607	27.731	36.991	45.837	222	120	90 3	2 35	32.8				
242	231	229	0 819	0.809	34.618	27.751	37.021	45.876	227	116	93 5	2 31	32.5				
243	274	272	0 767	0.755	34.624	27.759	37.032	45.890	226	118	95 5	2 32	32 5				
244	326	323	0.608	0.594	34.628	27.772	37.055	45.921	230	115	97 4	2 32	32 5				
245	377	373	0.373	0.357	34.617	27.777	37.074	45 953	237	110	100 0	2 30	32.3				
246	427	423	0 481	0.463	34.639	27.789	37.079	45.952	231	115	102 0	2 30	32.5				
247	477	472	0.590	0.569	34.652	27.793	37.077	45.944	229	116	102.8	2 30	32.5				
248	554	548	0 614	0.589	34.665	27.802	37.084	45.951	221	124	106 1	2 31	32.5				
102	578	572	0 660	0.633	34.671	27.804	37.084	45.947	218	127	111 8	2 28	32.1				
103	653	646	0 679	0.648	34.680	27.811	37.089	45.952	216	129	114 7	2 29	32.2				
104	754	745	0.501	0.466	34.672	27.815	37.104	45.977	219	127	117.0	2 29	32.3				
105	854	845	0.446	0.406	34.671	27.818	37.111	45.987	220	127	118 8	2 29	32 4				
106	956	945	0.386	0.341	34.673	27.823	37.120	45.999	221	126	120 9	2 29	32 4				
107	1056	1044	0.351	0.301	34.672	27.825	37.124	46.005	220	128	121.9	2 31	32.5				
108	1157	1143	0.241	0.186	34.669	27.829	37.134	46.022	222	127	122 3	2 30	32 5				
109	1258	1243	0.169	0.109	34.665	27.830	37.140	46.032	223	127	123.4	2 32	32.6				
110	1359	1342	0.125	0.059	34.665	27.833	37.146	46.041	223	127	123.2	2 33	32.9				
111	1460	1441	0.096	0.024	34.664	27.834	37.149	46.046	224	126.	123.5	2 33	32.8				
112	1611	1590	0.046	-0.034	34.664	27.837	37.155	46.055	226	125	124 3	2 33	32.8				
113	1762	1738	-0 005	-0.094	34.662	27.838	37.160	46.064	228	123	124.1	2 33	33.0				
114	1916	1889	-0.063	-0.162	34.661	27.841	37.167	46.074	230	122.	124.5	2 34	32.9				
115	2067	2038	-0.090	-0.199	34.660	27.842	37.170	46.080	231	121	124.9	2 35	33.0				
116	2267	2234	-0.134	-0 256	34.659	27.844	37.176	46.088	234	119	125.0	2 34	32.9				
153	2470	2433	-0 148	-0.285	34.661	27.847	37.180	46.095	235	118	129 0	2.37	33.1				
118	2670	2628	-0.201	-0.353	34.659	27.849	37.186	46.104	238	116	127 2	2 36	32 9				
119	2851	2806	-0.225	-0.391	34.658	27.850	37.189	46.110	239	115	127.2	2 34	32.8				
120	3053	3003	-0.251	-0.433	34.657	27.851	37.193	46.116	242	113	126.3	2 34	32 7				
121	3307	3252	-0.303	-0.506	34.653	27.851	37.198	46.125	245	110	124.0	2 33	32.5				
122	3564	3502	-0.326	-0 551	34.652	27.852	37.202	46.131	246	110.	123.5	2 32	32.6				
123	3821	3753	-0.351	-0.600	34.651	27.854	37.206	46.138	248	108	122 2	2 33	32.5				
124	4014	3940	-0.374	-0.640	34.650	27.855	37.209	46.144	249	108	121 3	2 32	32.4				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 125 Latitude 60- 1.1 S Longitude 47-52.2 W Date 2/11/84 Bottom Depth 4097 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
230	2	2	0.800	0.800	34.208	27.421	36.699	45.561	343	1	82.7	1.68	24.1	720	2173.	2336	
117	3	3	0.809	0.809	34.211	27.423	36.700	45.562	342	2	83.8	1.77	24.2				
234	30	29	0.641	0.640	34.215	27.437	36.724	45.594	343	3	83.2	1.68	24.2	724.	2172	2334.	
235	60	60	0.391	0.389	34.236	27.468	36.769	45.653	336	12	84.2	1.75	24.5				
236	91	90	-0.584	-0.587	34.399	27.649	37.005	45.941	293	64.	98.7	2.12	29.8				
237	120	119	-0.570	-0.574	34.461	27.699	37.053	45.987	293	64.	100.1	2.14	31.0				
238	141	139	-0.525	-0.529	34.495	27.724	37.075	46.006	291	65	101.2	2.15	31.4				
239	181	179	-0.493	-0.499	34.506	27.732	37.081	46.010	287	69	102.2	2.17	31.7	1008	2235	2349	
240	220	218	-0.467	-0.474	34.555	27.770	37.117	46.043	271	84	105.2	2.20	32.3				
241	242	239	-0.425	-0.433	34.565	27.777	37.120	46.044	268	87	106.2	2.20	32.2				
242	261	258	-0.397	-0.406	34.577	27.785	37.127	46.049	262	93	107.4	2.27	32.6				
243	302	299	-0.250	-0.261	34.603	27.799	37.132	46.046	244	109	111.8	2.25	33.0	1074	2247	2353	
244	352	348	-0.066	-0.079	34.624	27.807	37.129	46.032	235	116.	114.9	2.25	33.0				
245	403	399	0.045	0.029	34.639	27.813	37.128	46.026	234	116	114.9	2.26	32.7				
246	454	449	0.063	0.045	34.643	27.816	37.130	46.026	229	121.	117.2	2.26	33.0				
247	504	499	0.095	0.075	34.651	27.820	37.133	46.027	226	124.	119.8	2.27	33.2				
248	580	573	0.153	0.129	34.660	27.825	37.134	46.025	224	125	121.7	2.28	33.1				
102	656	649	0.082	0.055	34.660	27.829	37.142	46.038	219	131.	124.9	2.36	33.2	1123	2258	2359	
103	732	724	0.101	0.070	34.665	27.832	37.144	46.039	220	130.	125.3	2.35	33.3				
104	809	799	0.105	0.070	34.666	27.833	37.145	46.040	222	128.	126.3	2.33	33.5	1094	2257	2362	
105	883	873	0.096	0.057	34.669	27.836	37.149	46.044	223	127	127.3	2.32	33.6				
106	959	948	0.070	0.027	34.668	27.837	37.151	46.048	225	125	127.2	2.33	33.6				
107	1053	1040	0.031	-0.016	34.668	27.839	37.156	46.056	225	126.	127.2	2.33	33.6	1094	2256	2361.	
108	1204	1189	-0.022	-0.077	34.666	27.841	37.162	46.064	227	124.	126.9	2.33	33.7				
109	1354	1337	-0.065	-0.128	34.665	27.843	37.167	46.072	226	126.	129.0	2.35	34.2	1107.	2259	2362	
110	1504	1485	-0.108	-0.180	34.661	27.842	37.169	46.077	231	121.	127.6	2.34	33.9				
111	1652	1630	-0.129	-0.210	34.661	27.843	37.172	46.082	232	121	127.2	2.33	33.7				
112	1800	1776	-0.150	-0.240	34.660	27.844	37.175	46.086	233	120.	128.5	2.34	33.8	1090.	2259	2365	
113	1936	1909	-0.169	-0.268	34.661	27.846	37.179	46.092	235	118	128.4	2.33	33.8				
114	2085	2055	-0.194	-0.303	34.660	27.847	37.181	46.097	236	117	128.4	2.32	34.0				
115	2283	2250	-0.224	-0.346	34.658	27.848	37.185	46.102	239	115.	127.2	2.31	33.7	1078	2255	2362	
116	2484	2447	-0.263	-0.399	34.659	27.851	37.191	46.112	240	114	127.2	2.30	33.6				
153	2687	2646	-0.271	-0.423	34.657	27.850	37.192	46.114	242	113.	127.4	2.31	33.7				
118	2895	2849	-0.288	-0.456	34.656	27.851	37.195	46.119	243	112	125.9	2.29	33.6	1066	2251	2359	
119	3106	3055	-0.301	-0.486	34.654	27.851	37.197	46.122	245	110	126.1	2.29	33.6				
120	3311	3255	-0.320	-0.523	34.653	27.852	37.200	46.127	246	109.	124.8	2.30	33.4	1058	2249	2358	
121	3515	3454	-0.331	-0.552	34.652	27.852	37.202	46.131	250	106	123.4	2.29	33.2				
122	3719	3653	-0.334	-0.573	34.652	27.853	37.204	46.135	248	108.	122.4	2.28	33.1	1046	2247	2358	
123	3923	3851	-0.337	-0.596	34.651	27.854	37.206	46.137	249	107.	121.7	2.28	33.0				
124	4134	4057	-0.338	-0.617	34.651	27.855	37.208	46.141	249	107	120.9	2.26	32.8	1038	2251	2363	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 126 Latitude 60-26.1 S Longitude 48-28.8 W Date 2/12/84 Bottom Depth 1689 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	3	3	1.035	1.035	34.252	27.442	36.705	45.554	345	-3.	88.1	1.70	23.9	710.	2173.	2339	
102	33	33	0.793	0.792	34.281	27.481	36.757	45.619	344	0.	86.9	1.76	24.7				
103	63	62	0.486	0.484	34.336	27.543	36.837	45.714	339	8.	82.3	1.79	25.9				
104	93	92	-0.241	-0.244	34.377	27.615	36.951	45.868	316	38.	91.6	1.99	28.3				
105	122	121	-0.266	-0 270	34.464	27.687	37.023	45.940	305	49.	96.9	2.10	30.3				
106	153	151	-0.381	-0.386	34 492	27.715	37.058	45.980	295	60.	99.8	2.17	31.0				
107	182	181	-0.462	-0.468	34.502	27.727	37.074	46.001	290	65.	100.6	2.17	31.3				
108	222	220	-0.506	-0.513	34.542	27.762	37.111	46.040	272	84.	104.5	2.21	31.6				
109	262	259	-0 460	-0.469	34.554	27.769	37.115	46 042	262	93	106 6	2 22	31 8				
110	302	299	-0.309	-0.320	34.590	27.791	37.128	46.045	242	112.	112.9	2.26	32.8				
111	353	349	-0.190	-0.203	34.615	27.806	37.135	46.045	233	120.	117.1	2.26	33.1				
112	403	399	-0.128	-0 143	34.626	27.812	37.137	46.044	230	122.	117.2	2.25	33.0				
113	453	448	-0.095	-0.112	34.632	27.815	37.139	46.044	229	123.	117.6	2.25	33.0				
114	503	498	-0.048	-0.068	34.639	27.818	37.139	46.042	228	123.	118.0	2.23	33.1				
115	604	598	-0.015	-0.039	34.648	27.824	37.143	46.044	224	127.	121.5	2.26	33.2				
116	705	697	-0.007	-0 036	34.656	27.831	37.149	46.050	222	129.	124.1	2.27	33.3				
153	806	797	0.013	-0.021	34.663	27.835	37.153	46.052	220	131.	125.9	2.27	33.4				
118	908	897	-0.045	-0 084	34.661	27.837	37.158	46.061	224	127.	125.9	2.26	33.5				
119	1010	998	-0.079	-0.123	34.662	27.840	37.163	46.069	224	128.	127.3	2.28	33.4				
120	1110	1097	-0.084	-0.133	34.662	27.840	37.165	46.070	224	128.	127.9	2.27	33.3				
121	1262	1246	-0 114	-0.172	34.661	27.842	37.168	46.076	227	125.	127.9	2.27	33.2				
122	1413	1395	-0.136	-0.202	34.660	27.842	37.171	46.080	229	123.	127.1	2.28	33.3				
123	1564	1543	-0.177	-0.252	34.659	27.844	37.175	46.088	232	121.	125.7	2.27	33.2				
124	1689	1666	-0.194	-0.276	34.659	27.845	37.178	46.092	234	119.	124.6	2.27	33.1				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 127 Latitude 61- 0.0 S Longitude 48-30.6 W Date 2/12/84 Bottom Depth 2497 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	3	3	0 796	0.796	34.374	27.555	36.830	45.690	341	3	88.9	1.84	26.5				
102	31	31	0 669	0.668	34.372	27.562	36.844	45.710	340	5	89.1	1.85	26.6				
103	61	61	0 029	0.027	34.420	27 637	36.956	45.856	328	23	89.6	1.93	27.7				
104	91	90	-0.318	-0 321	34.453	27.681	37.020	45.939	313	41	91.0	1.99	28.5				
105	121	120	-0 532	-0.536	34.479	27.712	37.063	45.994	301	55	93.0	2.00	29.6				
106	150	149	-0 620	-0.625	34.528	27.755	37.111	46 047	279	78	97.9	2.13	30.9				
107	201	199	-0.550	-0.556	34.557	27.776	37.127	46.058	265	91.	101.3	2.14	31.6				
108	251	248	-0 509	-0.517	34.574	27 788	37.136	46.065	255	101.	103.0	2.17	31.9				
109	300	297	-0.361	-0.371	34.594	27.797	37.137	46.057	246	108	106.1	2.17	32.2				
110	400	396	-0.038	-0.053	34.634	27.814	37.134	46.035	227	124	113 1	2 20	32 6				
111	501	495	0 184	0.163	34.658	27.821	37.128	46.018	215	134	118.9	2.22	33.0				
112	602	595	0 179	0.154	34.666	27.828	37 136	46.025	214	135.	122.8	2.24	33.3				
113	700	692	0 121	0.091	34.665	27.831	37 142	46 035	216	134	124.3	2.26	33.3				
114	825	816	0.068	0.032	34.665	27.834	37.149	46.045	218	132.	125.9	2.25	33.1				
115	952	941	0 016	-0.026	34.663	27.835	37.153	46.053	222	129	126.5	2.25	33.2				
116	1103	1090	-0.027	-0.076	34.663	27.838	37.159	46.062	224	127	127.1	2.26	32.9				
153	1254	1239	-0 090	-0.147	34.662	27.841	37 166	46.073	229	123	125.8	2.25	33.0				
118	1406	1388	-0 176	-0.241	34.658	27.843	37.173	46.085	233	120	125.4	2.25	32.7				
119	1582	1561	-0 191	-0 267	34.662	27.847	37.179	46.092	234	119	131.6	2.26	32.9				
120	1758	1735	-0 236	-0.322	34.661	27.849	37.185	46 101	237	117	131.5	2.26	32.9				
121	1935	1908	-0.285	-0.382	34.660	27.851	37.190	46.110	241	113	131.1	2.25	32.9				
122	2162	2131	-0.388	-0 499	34.654	27.852	37.198	46 124	245	110	123.5	2.22	32.5				
123	2364	2328	-0 464	-0.588	34.648	27.851	37.202	46.134	250	106	116.8	2.22	32.4				
124	2524	2485	-0.500	-0.635	34.649	27 854	37.208	46 142	251	106	116 0	2 20	32 3				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 128 Latitude 61-42.0 S Longitude 48-30.2 W Date 2/12/84 Bottom Depth 3188 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	3	3	0.778	0.778	34.367	27.551	36.827	45.688	337	7.	87.7	1.90	26.3	799.	2190.	2338.	
102	25	25	0.577	0.576	34.366	27.562	36.850	45.722	337	9.	86.8	1.91	26.1	799.	2194.	2342.	
103	51	50	0.370	0.368	34.403	27.604	36.903	45.786	334	14.	87.6	1.94	26.0				
104	76	75	-0.145	-0.148	34.426	27.650	36.980	45.890	324	29.	88.6	1.99	27.8				
105	96	95	-0.878	-0.881	34.471	27.720	37.092	46.043	306	53.	90.9	2.10	29.6				
106	150	149	-0.695	-0.700	34.544	27.771	37.132	46.071	277	80.	98.6	2.20	31.4	1012.	2235.	2349	
107	201	199	-0.556	-0.562	34.571	27.787	37.139	46.070	262	94.	102.1	2.22	31.8				
108	301	298	-0.091	-0.102	34.628	27.811	37.134	46.039	229	123.	110.1	2.26	32.3				
109	402	398	0.238	0.222	34.662	27.821	37.125	46.011	212	136.	117.1	2.30	32.6	1118.	2255.	2356	
110	528	522	0.267	0.245	34.674	27.830	37.132	46.016	208	140.	123.8	2.34	33.1				
111	669	662	0.262	0.233	34.677	27.833	37.135	46.021	207	141.	127.7	2.35	33.5	1156.	2261.	2358	
112	779	770	0.207	0.173	34.677	27.836	37.142	46.031	209	140.	129.3	2.35	33.8				
113	906	895	0.155	0.115	34.674	27.837	37.146	46.038	209	140.	130.4	2.36	33.8	1156.	2266.	2363	
114	1057	1044	0.095	0.047	34.674	27.841	37.154	46.050	215	135.	131.0	2.37	33.5				
115	1209	1194	0.041	-0.015	34.671	27.842	37.159	46.058	219	132.	131.0	2.30	33.4	1129.	2258.	2358	
116	1411	1393	-0.027	-0.094	34.668	27.843	37.165	46.068	225	126	131.7	2.30	33.1				
153	1614	1593	-0.101	-0.180	34.666	27.846	37.173	46.081	230	122.	131.5	2.29	33.0	1097.	2253.	2357	
118	1817	1792	-0.161	-0.252	34.663	27.847	37.178	46.091	233	120.	131.2	2.28	32.7				
119	2019	1990	-0.220	-0.324	34.661	27.849	37.185	46.101	237	117.	130.7	2.28	32.6	1085.	2254.	2360	
120	2272	2239	-0.320	-0.440	34.655	27.850	37.192	46.115	243	112.	121.2	2.25	32.5				
121	2526	2488	-0.408	-0.545	34.652	27.852	37.201	46.130	248	108.	117.8	2.24	32.5	1051.	2246.	2356	
122	2780	2736	-0.506	-0.660	34.650	27.856	37.212	46.147	252	105.	116.1	2.22	32.2				
123	3034	2984	-0.645	-0.816	34.647	27.860	37.225	46.170	260	98.	108.8	2.19	32.0	1024.	2241.	2354	
124	3223	3169	-0.731	-0.916	34.644	27.861	37.233	46.183	265	94.	104.8	2.19	31.8	1011.	2239.	2354	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 129 Latitude 59-45.7 S Longitude 48-55.7 W Date 2/13/84 Bottom Depth 4188 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
217	2	2	2.297	2.297	34.038	27.177	36.374	45.160	335	-3.	35.6	1.55	23.4				
125	6	6	2.301	2.301	34.034	27.174	36.370	45.156	336	-4.	37.1	1.50	23.2				
203	24	23	2.271	2.270	34.040	27.181	36.379	45.166	335	-3.	35.8	1.55	23.6				
204	48	48	1.654	1.652	34.146	27.314	36.544	45.362	328	9.	48.0	1.72	25.3				
205	73	72	0.786	0.783	34.287	27.486	36.763	45.625	289	55.	71.4	2.17	30.0				
206	97	96	0.737	0.733	34.348	27.538	36.817	45.681	271	74.	76.5	2.27	31.3				
215	122	121	0.712	0.707	34.376	27.562	36.842	45.707	267	78.	79.5	2.28	31.5				
216	145	143	0.900	0.894	34.450	27.610	36.878	45.731	241	102.	82.0	2.32	32.5				
253	175	173	0.921	0.913	34.495	27.645	36.912	45.763	235	108.	86.1	2.30	32.4				
218	215	213	1.167	1.157	34.563	27.684	36.935	45.772	215	125.	88.3	2.31	32.9				
219	256	253	1.106	1.094	34.573	27.696	36.951	45.791	217	124.	89.8	2.32	32.8				
220	295	292	1.083	1.069	34.591	27.712	36.968	45.809	217	124.	91.9	2.30	32.6				
221	345	342	1.414	1.397	34.644	27.732	36.968	45.792	199	139.	92.5	2.29	32.6				
222	395	391	1.442	1.422	34.663	27.745	36.980	45.802	197	141.	94.4	2.26	32.5				
223	445	441	1.480	1.457	34.682	27.758	36.991	45.810	194	143.	96.8	2.24	32.1				
224	494	489	1.291	1.266	34.678	27.768	37.012	45.841	201	138.	98.7	2.22	32.2				
126	534	528	1.264	1.237	34.697	27.786	37.030	45.861	199	140.	105.3	2.21	32.2				
127	585	578	1.219	1.189	34.698	27.790	37.037	45.870	200	140.	106.4	2.22	32.6				
128	632	625	1.175	1.143	34.699	27.794	37.043	45.879	201	139.	107.0	2.22	32.5				
129	705	697	1.057	1.022	34.691	27.796	37.052	45.895	206	135.	108.0	2.22	32.5				
130	776	767	1.029	0.990	34.692	27.799	37.057	45.901	206	135.	109.8	2.21	32.5				
131	870	860	0.925	0.881	34.689	27.803	37.068	45.918	208	134.	111.3	2.22	32.5				
132	956	945	0.848	0.799	34.688	27.808	37.077	45.932	210	133.	112.5	2.21	32.5				
133	1114	1101	0.673	0.617	34.685	27.817	37.097	45.961	213	132.	116.2	2.22	32.4				
134	1279	1263	0.546	0.481	34.688	27.827	37.115	45.987	214	132.	120.9	2.24	32.5				
135	1427	1409	0.483	0.409	34.687	27.831	37.123	45.998	216	131.	122.5	2.24	32.9				
136	1581	1560	0.319	0.237	34.676	27.832	37.134	46.019	220	128.	121.7	2.24	33.3				
137	1784	1760	0.266	0.171	34.673	27.833	37.139	46.028	221	128.	124.6	2.25	33.0				
138	1988	1961	0.155	0.048	34.674	27.841	37.154	46.050	226	124.	124.8	2.25	33.2				
139	2191	2159	0.069	-0.051	34.665	27.839	37.158	46.059	226	125.	124.8	2.26	33.2				
140	2398	2362	0.026	-0.109	34.668	27.844	37.167	46.071	229	123.	125.7	2.25	33.1				
141	2605	2566	-0.057	-0.207	34.662	27.844	37.173	46.082	232	120.	124.5	2.26	33.0				
142	2813	2769	-0.100	-0.265	34.658	27.844	37.176	46.089	234	119.	124.3	2.28	32.7				
143	3068	3018	-0.132	-0.318	34.658	27.846	37.182	46.098	236	118.	124.7	2.28	33.2				
144	3327	3271	-0.182	-0.389	34.661	27.852	37.192	46.112	235	119.	122.8	2.26	33.2				
145	3585	3523	-0.235	-0.465	34.655	27.851	37.195	46.119	242	113.	124.7	2.25	33.0				
146	3843	3774	-0.283	-0.536	34.652	27.852	37.200	46.128	245	111.	123.5	2.25	33.0				
147	4050	3975	-0.315	-0.587	34.652	27.854	37.205	46.137	248	108.	122.2	2.24	32.8				
148	4224	4145	-0.333	-0.622	34.650	27.854	37.208	46.141	247	109.	120.8	2.23	32.7				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 130 Latitude 59-21.2 S Longitude 50-14.2 W Date 2/13/84 Bottom Depth 3547 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
206	6	5	1.316	1.316	34.337	27.491	36.737	45.570	321	19.	84.6	1.98	28.9	856.	2198.	2335	
213	31	30	1.051	1.050	34.345	27.516	36.777	45.623	318	24.	85.3	1.99	29.0				
214	60	60	0.431	0.429	34.447	27.636	36.931	45.809	301	46.	92.9	2.09	30.0				
215	90	89	0.261	0.258	34.455	27.652	36.957	45.845	298	51.	93.1	2.11	30.2	938.	2218.	2342	
216	119	118	0.135	0.131	34.475	27.675	36.987	45.882	292	58.	94.3	2.12	30.3				
253	149	148	0.090	0.084	34.493	27.693	37.007	45.903	283	67.	95.5	2.14	30.6	964.	2226.	2346	
218	178	176	0.113	0.106	34.514	27.708	37.021	45.916	279	71.	96.9	2.14	30.7				
219	218	216	0.124	0.116	34.533	27.723	37.035	45.929	270	80.	98.6	2.16	31.3				
220	258	255	0.140	0.130	34.550	27.736	37.047	45.940	266	84.	99.8	2.18	31.7	1009.	2235.	2349	
221	298	295	0.051	0.040	34.554	27.744	37.060	45.958	266	84.	100.4	2.19	31.6				
222	349	345	0.027	0.014	34.564	27.754	37.071	45.970	262	89.	102.1	2.20	31.7	1011.	2236.	2350	
223	398	394	-0.008	-0.023	34.578	27.767	37.086	45.987	258	93.	103.7	2.21	31.8				
224	446	441	0.057	0.039	34.593	27.776	37.091	45.988	252	98.	105.9	2.22	32.2	1042.	2242.	2352	
125	502	496	0.243	0.222	34.614	27.783	37.087	45.974	240	109.	106.8	2.22	32.3				
126	551	545	0.199	0.176	34.623	27.792	37.099	45.989	239	110.	108.2	2.23	32.3				
127	601	595	0.418	0.392	34.649	27.801	37.095	45.972	229	118.	110.4	2.23	32.3	1066.	2249.	2357	
128	651	644	0.558	0.528	34.666	27.807	37.092	45.962	221	125.	112.3	2.23	32.5				
129	727	719	0.517	0.484	34.664	27.808	37.096	45.968	224	122.	113.7	2.24	32.8	1062.	2255.	2364.	
130	802	793	0.177	0.142	34.637	27.806	37.114	46.005	236	113.	112.5	2.23	32.7				
131	900	889	0.454	0.412	34.675	27.821	37.113	45.989	220	127.	118.6	2.24	32.9	1071.	2255.	2363	
132	995	983	0.361	0.314	34.670	27.823	37.120	46.001	222	126.	119.5	2.25	32.9				
133	1088	1075	0.068	0.019	34.640	27.815	37.130	46.028	235	115.	115.4	2.25	32.8	1071.	2252.	2359	
134	1225	1210	0.146	0.088	34.652	27.821	37.132	46.026	229	121.	119.2	2.27	32.9				
135	1374	1357	-0.054	-0.119	34.641	27.823	37.146	46.052	233	119.	116.1	2.30	33.2	1083.	2254.	2360	
136	1530	1510	-0.003	-0.078	34.655	27.832	37.153	46.056	230	121.	120.8	2.29	33.1				
137	1685	1663	-0.052	-0.136	34.649	27.830	37.155	46.061	232	120.	120.2	2.29	33.3	1079.	2255.	2361	
138	1840	1816	-0.105	-0.198	34.645	27.830	37.158	46.068	234	118.	118.5	2.29	33.2				
139	1995	1968	-0.112	-0.216	34.649	27.834	37.163	46.074	233	120.	118.8	2.29	33.3	1091.	2257.	2362	
141	2149	2118	-0.109	-0.223	34.652	27.837	37.167	46.078	233	120.	119.3	2.28	33.2	1085.	2255.	2361.	
140	2149	2118	-0.109	-0.223	34.649	27.834	37.164	46.075	234	119.	119.7	2.28	33.2				
142	2353	2319	-0.112	-0.241	34.652	27.838	37.168	46.080	233	120.	120.5	2.28	33.3				
143	2559	2520	-0.120	-0.265	34.655	27.841	37.173	46.087	235	118.	122.3	2.28	33.3	1087.	2255.	2360	
144	2765	2722	-0.124	-0.285	34.659	27.845	37.179	46.093	235	118.	124.0	2.29	33.4				
145	2971	2923	-0.153	-0.330	34.661	27.849	37.185	46.102	238	116.	124.0	2.27	33.3	1076.	2253.	2360	
146	3167	3115	-0.192	-0.385	34.657	27.849	37.188	46.108	241	113.	124.0	2.27	33.2				
147	3368	3311	-0.208	-0.419	34.657	27.850	37.192	46.113	240	114.	124.2	2.28	33.2	1077.	2252.	2359	
148	3571	3509	-0.383	-0.607	34.650	27.853	37.206	46.139	249	107.	122.2	2.27	32.8	1053.	2247.	2357	

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 131 Latitude 59-26.0 S Longitude 52- 9.8 W Date 2/14/84 Bottom Depth 3368 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - -	- - -	uM/KG -	- - -	- - -	uatm	uM/kg	uEq/kg	uM/kg
125	2	1	3.014	3.014	33.873	26.984	36.145	44.897	331	-5	18 0	1 56	23.3	662	2128	2297	
206	4	4	2.986	2.986	33.874	26.988	36.150	44.903	334	-7.	21.1	1 53	23 1				
213	29	29	2.869	2.867	33.883	27.005	36.174	44.933	335	-8	20.7	1 54	23 0				
214	58	58	0.658	0.656	33.991	27.255	36.545	45.418	330	16	43 0	1 96	27 0				
215	82	81	-0.036	-0.039	34.090	27.374	36.702	45.612	303	49	52 9	2 16	29 8				
216	118	117	1.048	1.043	34.356	27.525	36.786	45.633	228	114	69.6	2.43	33 8				
253	148	147	1.461	1.454	34.453	27.574	36.811	45.634	203	135	75.6	2.42	34 4				
218	178	177	1.536	1.527	34.497	27.604	36.836	45.655	197	140	78.8	2 42	34 6				
219	218	216	1.842	1.831	34.557	27.630	36.844	45.646	184	151.	81 3	2 41	34 4				
220	259	256	1.878	1.864	34.588	27.652	36.864	45.663	183	151.	83.7	2 41	34 2				
221	299	296	1.881	1.865	34 620	27.678	36.889	45.688	181	153	86.7	2 40	33 8				
222	350	347	1.909	1.890	34.652	27.702	36.910	45.708	182	152.	88 8	2 38	33 5				
223	400	395	1.908	1.886	34.668	27.715	36.923	45.721	179	155	90.0	2 31	33 3				
224	450	445	1.868	1.843	34.685	27 732	36 943	45.742	181	153	92.9	2 29	33 0				
126	504	499	1.770	1.743	34.690	27.743	36.960	45.764	184	151	93.8	2 32	32 8				
127	554	548	1.729	1.699	34.698	27.753	36.972	45.778	186	149	95 3	2 31	32 7				
128	604	598	1.582	1.550	34.698	27.764	36.991	45.805	192	145	96.9	2 30	32 4				
129	656	648	1.536	1.501	34.701	27 770	37.000	45.817	192	145	98 8	2 29	32 4				
130	706	698	1.512	1.474	34.710	27 779	37.010	45.829	192	145	100 3	2 27	32 3				
131	756	747	1.546	1.505	34.720	27.785	37.014	45.831	190	147	102 4	2 29	32 4				
132	857	847	1.383	1.336	34.717	27.795	37.033	45.859	194	144.	105.9	2 27	32 3				
133	958	947	1.312	1.260	34.723	27.805	37.048	45.877	196	143	109 2	2 27	32.3				
134	1059	1047	1.206	1.148	34.719	27 810	37.059	45.894	197	143	111 7	2 28	32 4				
135	1160	1146	1.109	1.046	34.717	27.815	37.070	45.911	200	141	114 6	2.28	32.4				
136	1261	1246	1.023	0.954	34.717	27.821	37.081	45.927	202	140.	116.1	2.28	32 4				
137	1413	1395	0.874	0.796	34.711	27.826	37.096	45.950	205	138.	119.9	2 29	32 4				
138	1565	1545	0.723	0.637	34.705	27.832	37.110	45.973	209	136	123.4	2 30	32 6				
139	1716	1693	0.613	0.518	34.699	27.834	37.119	45.989	211	135	125 5	2 32	32 7				
140	1920	1894	0.343	0.238	34.677	27.833	37.135	46.020	219	129.	123.7	2 32	32.8				
141	2124	2094	0.255	0.136	34.673	27.835	37.143	46.034	221	128	125.5	2.30	32 9				
142	2327	2293	0.174	0.042	34.668	27.836	37.150	46.046	225	125	124.5	2 31	32 9				
143	2530	2492	0 121	-0.026	34.670	27.841	37.159	46.059	226	125	125.7	2.32	33 0				
144	2734	2692	0 035	-0 127	34.666	27.843	37.167	46.072									
145	2939	2892	-0.041	-0.218	34.664	27.846	37.175	46.086	233	120.	123.9	2 32	33 0				
146	3144	3092	-0.106	-0.299	34.658	27.845	37.180	46.094	235	118.	123.7	2 32	33.0				
147	3344	3288	-0.176	-0.385	34.657	27.849	37.188	46.108	239	115	123 5	2 29	32 9				
148	3395	3337	-0 214	-0 427	34.655	27.849	37.191	46.113	242	113	124.8	2 31	33.0				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 132 Latitude 59-34 7 S Longitude 53-55 8 W Date 2/14/84 Bottom Depth 3653 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3	PO4	NO3	pCO2 (20 C)	TCO2 (GC)	TALK (Calc)	TCO2 (Coul)
									- - - - -		uM/KG -	- - - - -		uatm	uM/kg	uEq/kg	uM/kg
125	1	-9	2.901	2.901	33.867	26.990	36.156	44.914	334	-7.	14.7	1.51	22.6	652.	2127.	2298	
202	3	3	2.907	2.907	33.866	26.988	36.154	44.912									
217	3	3	2.907	2.907	33.866	26.988	36.154	44.912	334	-7.	17.4	1.51	22.7				
203	26	26	2.879	2.877	33.867	26.992	36.160	44.918	334	-7.	17.0	1.51	22.7				
204	51	50	1.924	1.921	33.904	27.100	36.319	45.127	337	-2.	33.7	1.74	25.1				
206	74	74	0.022	0.019	34.031	27.323	36.649	45.557	323	29.	49.4	2.06	28.6				
205	75	74	0.018	0.015	34.032	27.324	36.650	45.558									
207	100	99	-0.021	-0.024	34.137	27.411	36.738	45.646	295	57.	58.7	2.22	30.9				
208	125	123	0.335	0.330	34.233	27.469	36.774	45.661	270	79.	65.4	2.30	32.4				
209	150	148	0.728	0.722	34.335	27.528	36.808	45.673	239	106.	70.3	2.38	33.7				
210	180	178	1.034	1.026	34.411	27.570	36.831	45.678	220	122.	75.4	2.40	34.0				
211	220	218	1.465	1.454	34.510	27.620	36.856	45.678	196	142.	81.3	2.40	34.6				
212	261	258	1.680	1.667	34.559	27.644	36.867	45.677	188	148.	83.6	2.40	34.6				
213	301	298	1.746	1.730	34.596	27.669	36.887	45.694	185	150.	86.1	2.39	34.3				
214	301	298	1.752	1.736	34.596	27.669	36.887	45.693									
215	351	348	1.816	1.797	34.632	27.693	36.907	45.709	182	153.	88.3	2.38	33.7				
216	401	397	1.791	1.769	34.658	27.716	36.931	45.734	183	152.	90.4	2.35	33.8				
253	452	447	1.767	1.743	34.671	27.728	36.945	45.750	183	152.	92.0	2.33	33.4				
218	502	497	1.662	1.635	34.671	27.736	36.959	45.769	187	149.	93.8	2.33	33.1				
219	578	572	1.654	1.623	34.697	27.758	36.981	45.791	188	148.	96.2	2.30	32.9				
220	578	572	1.659	1.628	34.696	27.757	36.980	45.790									
221	653	646	1.592	1.557	34.710	27.773	37.000	45.813	191	145.	98.7	2.29	32.7				
222	729	721	1.527	1.487	34.711	27.779	37.010	45.827	192	145.	101.1	2.29	32.6				
223	805	796	1.427	1.383	34.709	27.785	37.021	45.844	196	142.	103.1	2.29	32.5				
224	905	895	1.331	1.282	34.713	27.796	37.037	45.865	196	143.	105.5	2.28	32.4				
127	1058	1046	1.182	1.124	34.710	27.804	37.055	45.891									
126	1058	1046	1.182	1.124	34.710	27.804	37.055	45.891	202	138.	110.3	2.27	32.2				
128	1159	1145	1.059	0.996	34.705	27.809	37.067	45.910	206	135.	112.8	2.28	32.3				
129	1311	1295	0.919	0.848	34.703	27.817	37.083	45.935	208	135.	117.1	2.29	32.4				
130	1463	1445	0.848	0.767	34.707	27.825	37.096	45.952	208	135.	122.4	2.28	32.5				
131	1463	1445	0.848	0.767	34.706	27.824	37.095	45.951									
132	1615	1594	0.630	0.542	34.692	27.827	37.111	45.979	213	133.	123.4	2.30	32.3				
133	1767	1743	0.524	0.427	34.682	27.826	37.117	45.991	218	129.	123.6	2.29	32.3				
134	1918	1892	0.423	0.317	34.679	27.830	37.127	46.008	220	128.	124.3	2.29	32.1				
136	2119	2089	0.358	0.238	34.681	27.836	37.138	46.023									
135	2119	2089	0.358	0.238	34.681	27.836	37.138	46.023	220	128.	127.7	2.29	32.2				
137	2321	2288	0.249	0.116	34.677	27.839	37.149	46.040	222	127.	127.7	2.30	32.4				
138	2525	2487	0.168	0.020	34.672	27.840	37.156	46.052	226	124.	127.7	2.30	32.5				
140	2728	2686	0.077	-0.085	34.665	27.840	37.162	46.065									
139	2728	2686	0.076	-0.086	34.667	27.842	37.163	46.066	232	119.	126.5	2.30	32.6				
141	2932	2886	0.009	-0.169	34.664	27.844	37.170	46.078	233	119.	125.6	2.32	32.5				
143	3136	3084	-0.051	-0.245	34.663	27.847	37.178	46.090									
142	3136	3085	-0.051	-0.245	34.661	27.845	37.176	46.088	235	118.	125.4	2.32	32.7				
144	3331	3275	-0.088	-0.298	34.661	27.848	37.182	46.097	237	116.	125.3	2.32	32.7				
146	3533	3472	-0.168	-0.395	34.657	27.849	37.189	46.109									
145	3533	3473	-0.168	-0.395	34.656	27.848	37.188	46.109	242	112.	125.0	2.31	32.7				
147	3682	3617	-0.224	-0.463	34.655	27.851	37.195	46.119									
148	3682	3618	-0.224	-0.463	34.654	27.850	37.194	46.118	242	113.	125.2	2.31	32.6				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 133 Latitude 60- 5.2 S Longitude 55-15.3 W Date 2/14/84 Bottom Depth 3462 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
125	2	2	2.791	2.791	33.841	26.978	36.151	44.915	332	-4.	31.0	1.67	24.5				
206	3	3	2.750	2.750	33.842	26.983	36.158	44.924			32.6	1.75	24.6	705.	2133.	2292.	2125
207	3	3	2.769	2.769	33.839	26.979	36.153	44.918	333	-5.	32.2	1.78	24.6				
211	30	30	2.649	2.647	33.847	26.995	36.176	44.947	334	-5.	32.4	1.78	24.5	708.	2137.	2295	
212	59	58	-0.322	-0.324	33.981	27.299	36.647	45.574	340	15.	41.7	2.02	27.3				
213	88	87	-0.286	-0.289	34.119	27.409	36.752	45.675	296	59.	52.8	2.26	30.6	959.	2188.	2303.	
214	119	117	0.870	0.865	34.303	27.494	36.766	45.623	237	107.	62.9	2.44	33.6				
215	148	147	1.305	1.298	34.384	27.530	36.776	45.609	216	124.	69.5	2.49	34.1	1148.	2228.	2320.	2220
216	178	177	1.567	1.558	34.451	27.565	36.796	45.614	199	138.	74.5	2.51	34.6				
253	219	217	1.769	1.758	34.523	27.608	36.827	45.633	187	148.	80.2	2.49	34.4	1216.	2244.	2330	
218	259	257	1.763	1.750	34.545	27.626	36.845	45.651	185	150.	81.7	2.48	34.4				
219	300	297	1.844	1.828	34.581	27.650	36.863	45.664	181	153.	84.3	2.48	34.3	1209.	2248.	2335.	2249.
220	350	347	1.864	1.845	34.611	27.672	36.884	45.684	180	154.	86.4	2.46	33.8				
221	400	396	1.928	1.906	34.646	27.696	36.904	45.700	178	156.	88.7	2.41	33.5	1191.	2251.	2341	
222	451	446	1.954	1.929	34.670	27.713	36.919	45.714	179	154.	89.8	2.39	33.0				
223	502	496	1.938	1.910	34.681	27.723	36.931	45.726	180	154.	91.2	2.37	32.8	1153.	2249.	2344	
224	552	546	1.930	1.899	34.699	27.739	36.946	45.742	182	152.	93.0	2.35	32.4				
129	605	599	1.876	1.842	34.711	27.753	36.963	45.762	183	151.	95.8	2.26	32.4				
130	655	648	1.828	1.791	34.715	27.760	36.973	45.774	184	150.	97.6	2.24	32.3	1115.	2255.	2356	
131	732	724	1.775	1.734	34.719	27.767	36.984	45.788	186	149.	99.4	2.24	32.3				
132	807	798	1.668	1.623	34.725	27.781	37.003	45.813	188	148.	102.7	2.22	32.1	1095.	2255.	2359.	2248
133	908	898	1.558	1.507	34.726	27.790	37.019	45.835	191	146.	105.6	2.21	31.9				
134	1009	997	1.464	1.407	34.727	27.798	37.032	45.854	192	146.	107.5	2.24	32.0	1086.	2255.	2360	
135	1160	1146	1.329	1.264	34.728	27.809	37.051	45.880	196	143.	111.2	2.24	31.9				
136	1310	1294	1.224	1.150	34.723	27.813	37.062	45.897	199	141.	114.6	2.26	32.0	1084.	2257.	2363	
137	1462	1443	1.066	0.983	34.725	27.826	37.084	45.928	201	140.	118.9	2.28	32.3				
138	1613	1592	0.951	0.859	34.717	27.827	37.093	45.943	203	140.	122.5	2.26	32.4	1074.	2259.	2367.	2248.
139	1765	1741	0.821	0.720	34.713	27.833	37.106	45.965	206	138.	126.7	2.27	32.4				
140	1917	1891	0.713	0.602	34.710	27.838	37.118	45.983	209	136.	130.8	2.27	32.4	1081.	2261.	2368	
141	2069	2040	0.566	0.446	34.696	27.836	37.126	45.999	214	132.	129.8	2.28	32.4				
142	2271	2238	0.418	0.285	34.691	27.841	37.140	46.022	217	131.	131.7	2.31	32.6	1079.	2261.	2369	
143	2476	2439	0.251	0.105	34.678	27.841	37.151	46.043	223	127.	128.5	2.30	32.7				
144	2679	2638	0.165	0.005	34.673	27.842	37.158	46.056	226	124.	128.4	2.30	32.8	1085.	2255.	2361.	2246
145	2883	2838	0.065	-0.110	34.668	27.844	37.167	46.071	230	122.	126.5	2.30	32.7				
146	3087	3037	0.001	-0.190	34.663	27.844	37.172	46.080	233	119.	125.8	2.31	32.6	1076.	2254.	2361	
147	3289	3234	-0.048	-0.255	34.660	27.845	37.177	46.089	235	118.	126.4	2.30	32.7				
148	3501	3441	-0.113	-0.338	34.658	27.847	37.184	46.101	238	116.	126.1	2.30	32.6	1083.	2253.	2359.	2242

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 134 Latitude 60-43.8 S Longitude 55-27.8 W Date 2/15/84 Bottom Depth 3443 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	3	3	2.131	2.131	33.896	27.077	36.285	45.082	336	-2.	39.6	1.69	24.7	724.	2147.	2303.	
102	28	27	2 131	2 130	33 885	27.068	36 277	45.073	336	-2	39 3	1 69	24 6				
103	82	81	0.960	0.956	34.041	27.277	36.549	45.405	326	17.	56.3	1.86	26.6				
104	112	111	0.956	0.951	34.153	27.368	36.637	45.492	319	24.	68.1	1.97	27.6				
105	152	150	0.386	0.380	34.264	27.491	36.792	45.676	290	58.	76.1	2.11	29.6	945.	2207.	2328	
106	192	190	0.348	0.340	34.322	27.540	36.843	45.728	279	69.	80.1	2.15	30.2				
107	241	239	0.354	0.344	34.389	27.594	36.895	45.779	267	81.	83.8	2.19	30.7				
108	289	286	0.318	0.306	34.438	27.636	36.938	45.823	252	96.	86.6	2.22	31.5				
109	440	435	0.470	0.451	34.554	27.721	37.013	45.888	238	109.	94.2	2.23	31.4	1073.	2236.	2340	
110	642	635	0.652	0.622	34.639	27.779	37.060	45.925	222	123.	102.9	2.24	31.6				
111	893	883	0.585	0.542	34.668	27.807	37.092	45.961	218	128.	112.6	2.25	31.5	1070.	2252.	2359	
112	1147	1134	0.439	0.383	34.674	27.822	37.116	45.993	220	127.	117.0	2.24	31.6	1076.	2254.	2361	
113	1350	1334	0.479	0.410	34.691	27.834	37.126	46.001	215	132.	125.1	2.26	31.9	1079.	2257.	2364	
114	1705	1683	0.385	0.294	34.699	27.847	37.146	46.027	213	135.	133.2	2.28	32.4	1083.	2260.	2367	
115	1908	1882	0.166	0.064	34.679	27.844	37.156	46.051	223	127.	126.4	2.28	32.5				
116	2161	2130	0.052	-0.066	34.671	27.844	37.164	46.066	229	122.	125.3	2.30	32.6	1085.	2253.	2359	
153	2415	2379	-0.023	-0.159	34.668	27.846	37.172	46.079	231	121.	124.3	2.28	32.5				
118	2669	2627	-0.055	-0.210	34.663	27.845	37.174	46.084	232	121.	124.2	2.29	32.7				
119	2922	2876	-0.085	-0.260	34.663	27.848	37.179	46.092	235	118.	123.7	2.28	32.8	1075.	2254.	2361.	2243
120	3075	3025	-0.101	-0.288	34.660	27.847	37.180	46.094	235	118.	123.9	2.29	32.8				
121	3227	3173	-0.104	-0.305	34.659	27.846	37.181	46.096	235	118.	124.6	2.28	32.7	1079.	2250.	2356	
122	3328	3272	-0.101	-0.311	34.661	27.848	37.183	46.099	236	117.	125.3	2.28	32.9				
123	3430	3371	-0.101	-0.320	34.659	27.847	37.183	46.099	235	119.	125.7	2.30	32.9	1072.	2251.	2358.	
124	3490	3430	-0.101	-0.325	34.660	27.848	37.184	46.101	236	118.	125.4	2.31	32.9	1077.	2251.	2358.	2248

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 135 Latitude 60-47.4 S Longitude 55-34.8 W Date 2/15/84 Bottom Depth 2734 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	4	3	1.616	1.616	33.953	27.162	36.397	45.220	334	4	50.2	1.76	25.2				
102	28	28	1.426	1.425	33.992	27.206	36.452	45.284	331	8	54.0	1.81	26.0				
103	73	72	0.923	0.920	34.153	27.370	36.641	45.498	319	25	72.4	1.74	27.9				
104	103	102	0.896	0.892	34.152	27.370	36.644	45.502	318	26	71.8	1.78	28.0				
105	153	151	0.152	0.146	34.299	27.533	36.847	45.743	270	80	79.7	2.20	31.3				
106	193	191	0.230	0.223	34.359	27.577	36.885	45.776	256	93	82.8	2.23	32.1				
107	266	264	0.296	0.285	34.494	27.682	36.985	45.870	257	91	93.3	2.22	31.6				
108	339	336	-0.053	-0.066	34.510	27.714	37.037	45.942	275	77	95.8	2.22	31.2				
109	412	408	-0.165	-0.180	34.526	27.733	37.062	45.973	269	84	97.9	2.22	31.3				
110	487	482	0.183	0.163	34.575	27.754	37.063	45.953	251	98	99.3	2.24	31.9				
111	590	584	1.363	1.332	34.727	27.803	37.042	45.867	196	142	105.3	2.25	32.1				
112	691	683	0.470	0.439	34.650	27.799	37.090	45.965	226	121	109.8	2.26	32.2				
113	805	796	0.481	0.444	34.664	27.810	37.101	45.975	223	123.	113.7	2.26	32.3				
114	921	911	0.605	0.560	34.689	27.823	37.107	45.974	214	131.	120.4	2.27	32.5				
115	1085	1072	0.505	0.452	34.690	27.831	37.120	45.993	216	130.	124.5	2.28	32.5				
116	1303	1287	0.428	0.362	34.699	27.843	37.138	46.016	213	134	131.9	2.29	32.7				
153	1534	1514	0.245	0.167	34.687	27.845	37.151	46.039	219	130.	131.6	2.29	32.6				
118	1759	1735	0.150	0.059	34.683	27.847	37.160	46.055	222	128.	129.8	2.28	32.7				
119	1959	1932	0.021	-0.082	34.672	27.846	37.167	46.070	229	122.	127.6	2.29	32.9				
120	2156	2126	-0.052	-0.168	34.666	27.845	37.172	46.079	231	121.	127.0	2.27	33.0				
121	2360	2325	-0.068	-0.199	34.665	27.846	37.174	46.083	233	119.	126.7	2.27	32.8				
122	2569	2530	-0.058	-0.205	34.663	27.845	37.173	46.083	233	119	126.7	2.27	32.7				
123	2669	2628	-0.077	-0.231	34.663	27.846	37.176	46.087	233	120.	126.3	2.27	32.8				
124	2738	2695	-0.064	-0.224	34.663	27.846	37.175	46.086	235	118	126.0	2.26	32.8				

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 136 Latitude 60-48.9 S Longitude 55-38.6 W Date 2/15/84 Bottom Depth 1163 meters

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
117	4	4	1 488	1.488	34.052	27.250	36.491	45.319	329	10	61 6	1 94	26 4	786	2169	2315	
104	30	30	1.453	1 452	34.097	27.289	36.531	45.360	329	10	66.6	1.99	26.9				
105	60	60	1 162	1 159	34.127	27.333	36.591	45.436	323	18	68.7	2.02	27.3	836	2184	2322	
106	91	90	1 044	1 040	34.132	27.345	36.610	45.460	321	21	69 1	2 04	27 7				
107	121	119	0 889	0.884	34.127	27.351	36.625	45.484	319	25	68.3	2.10	27.8	855	2186	2320	
108	150	149	0 023	0.018	34.260	27.508	36.830	45.734	286	65	78 6	2 30	30 5				
109	181	179	0.338	0.331	34.402	27 605	36.907	45.791	251	97	85.8	2.38	31.9				
110	221	219	0 305	0 296	34.412	27.615	36.919	45.805	251	97	86.8	2.41	32.0	1068	2233	2338	
111	261	258	0 213	0 203	34.473	27.670	36.978	45.868	270	79	92.4	2.33	30.8				
112	301	298	0 020	0 009	34.482	27.688	37.007	45.907	279	72	93.7	2.31	30.6	988	2227	2344	
113	348	344	-0.025	-0.038	34.491	27.697	37 019	45.922	277	74	94.5	2.31	30.6				
114	393	389	-0.044	-0.059	34.498	27.704	37 027	45.931	275	77	95.0	2.34	30.8				
115	442	438	-0.064	-0.081	34.500	27.707	37.031	45.936	273	79	95.0	2.33	30.7	1003.	2231	2346	
116	494	488	-0.102	-0.121	34.512	27.719	37.045	45.952	273	79	95.6	2.34	30.6				
153	546	540	-0 144	-0.165	34.520	27.727	37.056	45.966	273	79	96.5	2.34	30.8				
118	598	592	-0.215	-0.238	34.539	27.746	37.079	45.992	271	82	98.5	2.33	31.0	1014	2236	2350	
119	676	668	-0.258	-0.284	34.548	27.756	37.091	46.007	267	87	100.0	2.33	31.2				
120	754	746	-0.278	-0.308	34.554	27.762	37.098	46.016	267	87	100.6	2.33	31.2				
121	855	846	-0 179	-0.214	34.593	27.789	37.119	46.030	253	100.	107.1	2.37	31.7	1048	2243	2353	
122	935	925	0.173	0.131	34.645	27.813	37.122	46.013	233	116	115 7	2 30	32 1				
123	1056	1044	0.584	0.532	34.703	27.836	37.121	45.990	210	136.	127.8	2.30	32.4	1068.	2259	2368	
124	1153	1139	0.572	0.514	34.700	27.835	37.121	45.990	212	134	127.7	2.30	32.3	1082	2260	2367	

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Seawater Data for AJAX (LONG LINES) Printed on 24-DEC-86

Leg 2 Station 137 Latitude 60-49.7 S Longitude 55-38.5 W Date 2/15/84 Bottom Depth 446 meters

Bottle No	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
106	2	2	1.617	1.617	33.973	27.177	36.413	45.235	334	4	48.9	1.83	25.8				
111	25	25	1.332	1.321	34.010	27.227	36.478	45.315	330	10	52.8	1.88	26.3				
112	45	45	1.361	1.359	34.053	27.260	36.508	45.343	328	12	58.6	1.92	26.6				
113	69	68	1.118	1.115	34.111	27.323	36.584	45.431	323	19	64.9	1.98	27.5				
114	100	99	0.025	0.021	34.205	27.463	36.786	45.691	294	58	72.8	2.16	29.9				
115	119	118	0.026	0.022	34.244	27.495	36.817	45.721	286	65	75.5	2.19	30.5				
116	150	149	0.146	0.140	34.295	27.530	36.844	45.741	281	69	79.8	2.21	30.6				
153	175	174	0.297	0.290	34.357	27.572	36.876	45.763	275	74	85.0	2.22	30.6				
118	200	198	0.314	0.306	34.414	27.617	36.919	45.805	271	77	89.5	2.22	30.7				
119	241	238	0.046	0.037	34.469	27.676	36.993	45.893	275	76	93.5	2.22	30.7				
120	281	279	-0.030	-0.040	34.496	27.702	37.023	45.926	273	78	94.6	2.21	31.0				
121	321	318	-0.048	-0.060	34.501	27.706	37.029	45.934	272	80	96.0	2.22	31.0				
122	359	355	-0.062	-0.076	34.506	27.711	37.035	45.940	271	81	96.6	2.23	31.1				
123	406	402	-0.103	-0.118	34.519	27.724	37.050	45.957	270	82	97.0	2.22	31.2				
124	444	440	-0.157	-0.174	34.527	27.733	37.062	45.972	271	82	97.8	2.22	31.1				

LAMONT-DOHERTY GEOLOGICAL OBSERVATORY OF COLUMBIA UNIVERSITY

Seawater Data for AJAX (LONG LINES) Printed on 23-DEC-86

Leg 2 Station 138 Latitude 58- 8.3 S Longitude 64-26.4 W Date 2/17/84 Bottom Depth N/A

Bottle No.	Press dbar	Depth m	Temp deg C	Pot Temp deg C	Salinity o/oo	Sigma Theta	Sigma 2	Sigma 4	Oxy	AOU	SiO3 uM/KG	PO4	NO3	pCO2 (20 C) uatm	TCO2 (GC) uM/kg	TALK (Calc) uEq/kg	TCO2 (Coul) uM/kg
118	2	2	7.400	7.400	34.060	26.623	35.562	44.107						555.	2084.	2277	2076.

```
C                              APPENDIX A

C  ********** SUBROUTINE TALKX **********

C  TO CALCULATE TOTAL ALKALINITY (TALK) FROM TOTAL CO2 AND PCO2

C  This is a FORTRAN 77 program using the symbol @ in column
C  six as a continuation mark for a line of code longer than
C  72 characters.

C     ***************************************************************
C     * PROGRAMMER:  S. C. SUTHERLAND                               *
C     *              LAMONT-DOHERTY GEOLOGICAL OBSERVATORY          *
C     *              PALISADES, NY  10964                           *
C     *              U.S.A.                                         *
C     *    PHONE:  (914) 359 2900 EXTENSION 632                     *
C     ***************************************************************


      SUBROUTINE TALKX (ITEMP,ISALIN,IPO4,ISIO3,IPCO2,ITCO2,TALKOU)
      REAL TEMP,SALIN,PO4,SIO3,PCO2,TCO2,TALKOU,ITEMP,ISALIN,IPO4
     1,ISIO3,IPCO2,ITCO2,K1CO2,K2CO2,K6,KCO2,K1PO4,K2PO4,KH2O
     2,KB,KSIO3,H2CO3,ASIO3,APO4,AH2O,ACO3,HCO3,CO3,ABORON,TBORON
     3,CB,CU,HION
      INTEGER I,J,K

C  The function "LOG" is the natural logarithm

C  UNITS:

C   TEMP IN DEG C.
C   SALINITY IN O/OO
C   PO4 IN UMOL/KG
C   SIO3 IN UMOL/KG
C   PCO2 IN UATM
C   TCO2 IN UMOL/KG

C  VARIABLES WHICH BEGIN WITH I (IPCO2, ISIO2, ETC.) ARE USED AS
C  INPUT VARIABLES, AND ARE MOVED TO WORKING VARIABLES WITHIN THE
C  SUBROUTINE, TO PROTECT THEIR SEPARATION FROM ANY CALLING ROUTINE

C  CONVERT UNITS TO MOLES/KG, ATMOSPHERES, AND DEG K.

      TEMP = ITEMP + 273.15
      SALIN = ISALIN
      PO4 = IPO4 * 1E-6
      SIO3 = ISIO3 * 1E-6
      PCO2 = IPCO2 * 1E-6
      TCO2 = ITCO2 * 1E-6

C  CALCULATE SOLUBILITY OF CO2 IN SEAWATER  KCO2

      KCO2 = EXP (-60.2409 + 9345.17 / TEMP + 23.3585 *
     @  LOG (TEMP/100.) + SALIN * (0.023517 - 2.3656E-4
     @  * TEMP + 4.7036E-7 * TEMP * TEMP))
```

```
C  Calculate solubility constants K1 & K2 of carbonic acid
C  as determined by Mehrbach, et. al. (Mehrbach, C., C.H. Culberson,
C  J.E. Hawley and R.M. Pytkowicz 1973,Limnology and Oceanography,
C  18, 897-907.)

C  K1CO2, K2CO2

     K1CO2 = 10. ** (13.7201 - 0.031334 * TEMP - 3235.76 / TEMP
     @  - 1.3E-5 * SALIN * TEMP + 0.1032 * SQRT(SALIN))

C  INTERMEDIATE VARIABLE K6

     K6 = ( -5371.9645 - 1.671221 * TEMP - 0.22913 * SALIN
     @  + 128375.28 / TEMP + 8.0944E-4 * SALIN * TEMP - 2.136
     @  * SALIN / TEMP + ( -18.3802 * LOG (SALIN) + 2194.3055
     @  * LOG (TEMP) + (5617.11 / TEMP) * LOG (SALIN)) / 2.302585)

     K2CO2 = EXP (2.302585 * K6)

C  Calculate dissociation constant of boric acid after Lyman (1956),
C  (Lyman, J. 1956, Buffer Mechanism of seawater,
C  ph.D. Thesis, Univ. of Calif., Los Angeles, 196 pp.)

     KB = 10. ** ( -9.26 + 0.00886 * SALIN + 0.01 * ITEMP)

C  Calculate dissociation constants for phosphoric acid after Kester
C  and Pytkowicz, 1967.  (Kester, D.R. and R.M. Pytkowicz 1967,
C  Determination of the apparent dissociation constants of
C  phosphoric acid in seawater.
C  Limnology and Oceanograph, 12, 243-252)

     K1PO4 = EXP ( -9.039 -1450. / TEMP)

     K2PO4 = EXP ( 4.466 - 7276. / TEMP)

C  Calculate dissociation constant for silicic acid after Ingri (1959
C  (Ingri, N., 1959, Equilibrium studies of polyanions IV.  Silicate
C  ions in NaCl medium, Acta Chemica Scandinavica, 13, 758-775.)

     KSIO3 = 4.0E-10

C  Calculate dissociation of water by the convention used by
C  Culberson and Pytkowicz (1973) (Culberson, C.H. and R.M. Pytkowicz
C  1973, Ionization of water in seawater, Marine Chemistry,
C   1, 403-417.)

     KH2O = EXP (148.9082 - 13847.26 / TEMP - 23.6521 * LOG (TEMP)
     @  + ( -79.2447 + 3298.72 / TEMP + 12.0408 * LOG (TEMP))
     @  * SQRT(SALIN) - 1.9813E-2 * SALIN)

C  Calculate activity of H+ ion by formulation of Takahashi, et.al.
C  (1982a) of Culberson and Pytkowicz (1973) (Takahashi, T.,
C  R.T. Williams and D.L. Bos 1982a, Carbonate chemistry, in
C  "GEOSECS PACIFIC EXPEDITION", Vol. 3 Hydrographic Data,
C  1973-1974. W.S. Broecker, D.W. Spencer and H. Craig, U.S.
C  Government Printing Office, 78-82.)
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      FH = 1.29 - 0.00204 * TEMP + 4.61E-4 * SALIN * SALIN
     @  - 1.48E-6 * SALIN * SALIN * TEMP

C  CALCULATE TOTAL BORON (BASED ON CULKIN, 1965)
C  (Culkin, F., 1965, The major constituents of sea water, in
C  CHEMICAL OCEANOGRAPHY, Vol. I, Chapter 4, First Edition,
C  J.P. Riley and G. skirrow editors, Academic Press, London,
C  121-161.)

      TBORON = 4.106E-4 * SALIN / 35.

C  MAJOR CALCULATIONS BEGIN HERE:

      H2CO3 = KCO2 * PCO2

      HION = (K1CO2 + SQRT(K1CO2 * K1CO2 + 4. * K1CO2 * K2CO2
     @  * (TCO2 / H2CO3 - 1.))) / ( 2. * (TCO2 / H2CO3 - 1.))

      ACO2 = KCO2 * PCO2 * (K1CO2 / HION + 2. * K1CO2 * K2CO2
     @  / (HION * HION))

      ABORON = KB * TBORON / (HION + KB)

      ASIO3 = KSIO3 * SIO3 / (HION + KSIO3)

      APO4 = PO4 * (1 / (1 + K1PO4 / HION + K1PO4 * K2PO4
     @  /  HION**2) + 2 / (1 + HION / K1PO4 + K2PO4 / HION)
     @  + 3 / ( 1 + HION / K2PO4 + HION * HION / (K1PO4 * K2PO4)))

      AH2O = KH2O * FH / HION - HION / FH

      TALKOU = (ACO2 + ABORON + ASIO3 + APO4 + AH2O)/1.E-6

      HCO3 = K1CO2 * H2CO3 / HION

      CO3 = K2CO2 * HCO3 / HION

      RETURN
      END
```

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